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ABSTRACT

This comprehensive curriculum guide for junior high through adult levels presents foods and nutrition as they relate to quality living, career orientation, and occupational training. The first section is a conceptual outline of core material in foods and nutrition. Five instructional levels are I (grades 7-9), II (9-10), III (10-11), IV (11-12), and V (12-adult). Levels at which each concept is taught are indicated as well as location of the concepts in the units by page number. Nine concepts are included: nutrition, consumer practices, meal planning, kitchen equipment, sanitation and safety, management, food preparation, food preservation, and food related occupations. Resource units follow. Materials in five units for the five levels include overall and behavioral objectives, unit outline, and detailed outline incorporating behavioral objectives and learning and evaluation experiences. Guides for seven semester courses follow the same format. The next section contains five mini-units or modules for adult education. Concepts, behavioral objectives, and learning experiences are identified. The final section is a guide for promoting and teaching occupational food service to grade 11-12 home economics students or out-of-school youth and adults. Appendixes, amounting to approximately one-third of the guide, include (1) teaching suggestions; (2) puzzles, games, and display ideas; (3) laboratory suggestions; (4) test items; and (5) bibliography and resources. (YLB)

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DEPARTMENT OF PUBLIC EDUCATION

STATE OF LOUISIANA

Bulletin 1595

FOODS AND NUTRITION
CURRICULUM GUIDE

for

Junior High, Secondary, and Adult
Vocational Home Economics Programs

Issued by

Division of Vocational Education, Home Economics Section

N. J. Stafford, Jr.
Assistant Superintendent

J. Kelly Nix
State Superintendent

CE 029 034

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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FOREWORD

This Curriculum Guide for Foods and Nutrition is an important step toward the development and/or revision of several subject area guides for use in the vocational home economics programs in Louisiana.

Since this guide was developed by selected teachers, I am confident that it will be practical and helpful in structuring individual school programs that will more effectively meet the needs of youth, adults, families, and communities, as well as provide methods of accountability.

The State Department of Education extends gratitude and appreciation to Dr. Daisy H. Daniels, Teacher Educator of Vocational Home Economics Education at Northeast Louisiana University, who served as project director, and to each person who contributed to the development of this guide.

J. Kelly Nix, Superintendent
Department of Education

ACKNOWLEDGMENTS

This Curriculum Guide for Foods and Nutrition is a result of a two-year project funded by the Division of Vocational Education, State Department of Education. Teams of selected in-service teachers worked at summer workshops in 1979 and 1980 in cooperation with the Department of Home Economics at Northeast Louisiana University in developing this guide.

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Finally, grateful appreciation is expressed to those many persons who served as consultants, tested the curriculum materials, and gave valuable suggestions for this project.

N. J. Stafford

N. J. Stafford, Jr., Ed. D.
Assistant Superintendent
Division of Vocational Education

RATIONALE

Providing food for the individual and family has become more complex as scientific and technological advances have affected societal changes. Nutrition research is constantly providing new information regarding ways that food choices influence one's health, energy, and appearance both now and in the future. Choices in today's market are becoming increasingly complicated as new and different forms of food are introduced to the American consumer.

Modern equipment provides new and different ways to prepare and store food. In addition, changing life styles and availability of fast food services increase the need for effective management of resources in providing proper nutrition. Education in planning, selecting, storing, preparing and serving food has become an increasingly important part of the curriculum.

The purpose of this comprehensive curriculum guide is to present foods and nutrition as it relates to quality living, career orientation, and occupational training. Specific objectives for this curriculum guide are as follows:

-provide a complete list of concepts which are taught in the area of foods and nutrition.

-provide resource units of instruction with concepts to be taught at Levels I-V.

-provide suggested conceptual outlines for semester courses in foods and nutrition.

-provide suggested mini-units in foods and nutrition to be incorporated in semester courses in other areas.

-provide resource modules for teaching five concepts in the area of foods and nutrition for adult or continuing education programs.

-provide resource units for occupational food service courses.

-provide a variety of suggestions for teaching strategies and visuals.

-provide selected test items on each concept as a ready resource for evaluation purposes.

-provide a list of resources and publishers for teaching materials.

The Northeast Curriculum Project, 1978-80, developed resource units which include concepts and subconcepts, behavioral objectives, learning, and evaluation experiences. Resource materials, along with ideas for display boards, games, puzzles, and test items, are provided in this guide. Vocational Home Economics Teachers in Natchitoches Parish, 1976-78, are credited with developing the Conceptual Framework of Core Materials used as the basis for this curriculum guide.

The home economics teacher is urged to select teaching strategies that are appropriate for learners with special needs such as the handicapped, disadvantaged, gifted, potential dropout and adult. This guide was designed for as much flexibility as might be needed for innovative teaching and yet also serve as a guide for consistency in instruction despite differences in facilities and programs.

HOW TO USE THIS GUIDE

THE TEACHER MUST UNDERSTAND THE ORGANIZATION OF THE GUIDE IN ORDER TO USE IT EFFECTIVELY. The diagram below explains the five instructional levels used in the conceptual outline of core material. Traditional grade levels have been suggested to correlate with Levels I-V. The level of skill and ability of students may vary due to the entry level into home economics. Pretesting is recommended upon entry to a program to determine the competency level of each student.

...Level V...Continuing...
(12, Adult)

...Level IV...
(11, 12...)

...Level III...
(10, 11...)

...Level II...
(9, 10...)

Entry...Level I...
(...7, 8, 9)

PERSONS USING THIS GUIDE SHOULD BE AWARE OF THE FOLLOWING:

1. The length of class time alloted each unit will be determined by the current Minimum Standards for Vocational Home Economics in Louisiana.
2. The Conceptual Outline of Core Materials is a topical outline of all subject matter taught in Levels I-V.
3. Each unit outline is coded to the conceptual outline of Core Materials and includes only those topics which are taught at that particular level. Location of concepts in the units is indicated by the page number in the columns on the Conceptual Outline of Core Materials.

EXAMPLE:

CONCEPTUAL OUTLINE	LEVELS				
	I	II	III	IV	V
I. NUTRITION*	34	61	91	133	157
A. Food Facts and Functions	34	61	91	133	
1. USDA's Daily Food Guide	34	61			
2. Caloric Requirements		61	91		

*from Conceptual Outline on page 4

The teacher will observe from the example above that I. NUTRITION will be taught at all levels. The simple learning experiences begin at Level I and advance to more difficult experiences at Level V. A. Food Facts and Functions is taught at Levels I, II, III, and IV. Subconcept 1. USDA's Daily Food Guide is taught only at Levels I and II and 2. Caloric Requirements will not be introduced at Level I, but taught at Levels II and III. Concepts are identified only at the levels at which they will be taught. Consequently, the Unit Outlines are not numbered or lettered consecutively. This simply indicates that the "missing" concept is taught at another level.

CONCEPTUAL OUTLINE OF CORE MATERIALS
IN
FOODS AND NUTRITION

"YOU CAN'T DO TODAY'S JOB WITH YESTERDAY'S TOOLS
AND BE IN BUSINESS TOMORROW."

CONCEPTUAL OUTLINE OF CORE MATERIAL
IN
FOODS AND NUTRITION

	LEVELS				
	I	II	III	IV	V
I. Nutrition	34	61	91	133	157
A. Food Facts and Functions	34	61	91	133	
1. USDA's Daily Food Guide	34	61			
Milk and milk products					
Meat, poultry and fish					
Vegetables and fruits					
Breads and cereals					
Fats, sweets and alcohol					
2. Caloric Requirements		61	91		
3. Recommended Daily Allowances			91	133	
4. Nutrients, Functions and Sources	34	61	91		
Carbohydrates					
Proteins					
Fats					
Minerals					
Vitamins					
Water					
B. Current Issues and Concerns		62	92	133	
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Family					
Attitudes					
Incomes					
Culture					
Religion					
Locale					
Availability					

	LEVELS				
	I	II	III	IV	V
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"Nibbling"					
Overeating					
Teenage					
Meal skipping					
Snacking					
Fad dieting					
2. Food Fads and Myths		62	92		
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Grapefruit and eggs					
Chemical					
Food cures for disease					
Health foods					
Sources of information					
3. Additives and Preservatives			92	133	
Definition					
Function or uses					
Color					
Texture					
Quality					
Protection					
Dietary					
Effects					
Physical					
Mental					
4. Nutrition - Health Problems		62		133	
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Food scarcity					
World Health Organization					
5. Food of the Future				133	
New food products					
Animal					
Vegetable					
Man-made					

	LEVELS				
	I	II	III	IV	V
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Shellfish					
Fish protein concentrate					
Plant sources					
Technological aspects					
Scientific research					
Engineered foods					
C. Special Dietary Needs		63	93	133	157
1. Therapeutic				133	
Disease					
Allergy					
Convalescent					
2. Pregnancy and Lactation		63	93	134	
3. Weight Control		63	93		
4. Senior Citizen				134	
5. Children			93		
6. Infants			93		
7. Adolescents		63			
II. Consumer Practices	35	64	94	134	157
A. Government Agencies, Laws and Assistance Programs		64	94	134	
1. Consumer Protection Laws			94		
2. Agencies			94	134	
USDA - United States Department of Agriculture					
FDA - Food and Drug Administration					
Department of Commerce					
BBB - Better Business Bureau					
FTC - Federal Trade Commission					
3. Assistance Programs		64	94	134	
Food stamps					
Benefits					
Qualifications					

	LEVELS				
	I	II	III	IV	V
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Child Nutrition Programs					
Current Federal, State and Local Programs					
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1. Types		64	94		
Television					
Newspaper					
Coupons					
Word-of-mouth					
2. Benefits		64	95		
3. Effects		64	95		
4. Persuasive Techniques		64	95		
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1. Food Purchases		64	95		
2. Market Orders	35	65	95		
3. Price Comparison			95	134	157
4. Income			96	134	157
5. Meal Planning			96	135	157
6. Comparative Shopping			96	135	
D. Purchasing Food and Equipment	35	65	96	135	157
1. Factors Affecting Cost		65	96	135	157
Form					
Attitude					
Availability					
Display Techniques					
Culture					
Weather					
Transporation					
Labor					
Importation					

	LEVELS				
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3. Packaging			97		
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Types and purposes					
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Income					
Amount allowed					
4. Time	36	66	99	135	158
5. Variety	36	66	99	135	158
Kinds of food					
Color					
Size and shape					
Texture					
Flavor					
Method of preparation					
Forms					
6. Activities	36	67	99	135	158
7. Likes and Dislikes	36	67	99	135	158
8. Number of People	36	67	99	135	158
9. Age	36	67	99	135	158
10. Health	36	67	99	135	158
11. Occupation	36	67	100	135	158
12. Climate	36	67	100	135	158
B. Menu Writing			100	136	
1. Form			100	136	
2. Terms			100	136	
C. Meal Patterns	37	67	100	136	158
1. Breakfast	37	67			

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3. Supper			100		
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Holloware					
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(NOTE: Arranged alphabetically, not necessarily in teaching sequence)

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Leavening					
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Forms					

	LEVELS				
	I	II	III	IV	V
Grades					
Size					
Weight					
Condition					
Principles of preparation					
Protein cookery					
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Shortening					
Oils					
Animal					
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Lard					
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Fin					
Methods of cooking					
Bake					

	LEVELS				
	I	II	III	IV	V
Broil					
Steam					
Simmer					
Pan fry					
Deep fry					
Poach					
Principles of preparation					
Protein cookery					
Temperature					
Cooking time					
Care and storage					
14. Fruits	50	80	116		
Classification					
Fresh					
Frozen					
Canned					
Dried					
Cooked					
Methods of cooking					
Bake					
Boil or stew					
Broil					
Fry					
Glaze					
Preserve					
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Corn					
Wheat					
Rice					
Oat					

	LEVELS				
	I	II	III	IV	V
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Starch cookery					
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Classificiation					
Beef					
Pork					
Lamb					
Game					
Grading					
Forms					
Fresh					
Cured					
Canned					
Frozen					
Methods of cooking					
Dry heat					
Pan broiling					
Broiling					
Roasting					
Baking					
Moist heat					
Braising					
Stewing					
Simmering					
Cooking in fat					
Deep fat					
Pan frying					
Extenders					
Principles of preparation					
Protein cookery					
Temperature					
Cooking time					
Carving					

	LEVELS				
	I	II	III	IV	V
17. Milk	51	81	118		
Forms					
Fluids					
Solid					
Classification					
Raw					
Fresh					
Processed					
Pasteurized					
Homogenized					
Canned					
Dehydrated					
Principles of preparation					
Protein cookery					
Care and storage					
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Two crust					
Tarts					
Turnovers					
Cream puffs and eclairs					
Principles of preparation					
Ingredients					
Proportions					
Mixing					
Rolling and shaping					
Baking					
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Turkeys					
Ducks					

	LEVELS				
	I	II	III	IV	V
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Geese					
Game					
Forms					
Fresh					
Frozen					
Canned					
Methods of cooking					
Dry heat					
Broiling					
Baking					
Roasting					
Moist heat					
Barbecue					
Braising					
Cooking in liquid					
Cooking in fat					
Deep fat					
Pan frying					
Principles of preparation					
Protein cookery					
Temperature					
Cooking times					
Moisture retention					
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Accompaniment					
Main dish					
Separate Course					
Appetizer					
Dessert					

			LEVELS		
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Fruit					
Vegetable					
Meat, fish, poultry and egg					
Gelatin					
Frozen					
Hot					
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Mayonnaise					
Cooked - base					
Variations					
Principles of preparation					
Flavor and texture combinations					
Artistic color and arrangement					
Care and storage					
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Accompaniment					
Refreshment					
Principles of preparation					
Construction techniques					
Handling					
Wrapping					
Care and storage					
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Basic white sauce					
Meat gravy					
Brown sauces					
Dessert sauces					
Variations					

	LEVELS				
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Protein cookery					
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Milk base					
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Fresh					
Canned					
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Herbs					
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Acid					
Synthetic substitutes					
Forms					
Fresh					
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	LEVELS				
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Enhance flavor					
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Classification					
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Artificial					
Forms					
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Cubes					
Powdered					
Granulated					
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Forms					
Frozen					
Fresh					
Canned					
Dehydrated					
Methods of preparation					
Baking					
Boiling					
Pan frying and sauteing					
Deep fat frying					
Steaming					
Waterless cookery					
Pressure steaming					
Panning					
Storage					
Classification					
Mild					
Strong					

	LEVELS				
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Covered or uncovered					
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Color, flavor, texture retention					
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	I	II	III	IV	V
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RESOURCE UNIT FOR CONSUMER AND HOMEMAKING

LEVEL I

LEVEL I
Beginning Foods and Nutrition

The format of the middle school and junior high school home economics programs varies throughout the state, ranging in grade level from 6-9 and in time from 6 weeks to 9 months. Therefore this resource unit for entry level study of foods and nutrition has been designed for adapting to any of these situations. Learning experiences may be selected to correspond with the students' abilities. Experiences have also been planned so that FHA may be an integral part of regular classroom activities.

Concepts have been developed with the assumption that foods laboratory facilities will be available. In the event that laboratory facilities and finances are limited, demonstrations by the teacher may be used to teach basic techniques.

Overall Objectives:

After completion of this unit, the student will be able to:

Use the USDA's Daily Food Guide and basic principles of food preparation to plan, prepare, serve and evaluate nutritional snacks and refreshments.

List job opportunities in food related occupations at the entry level.

Behavioral Objectives:

I. Name the groups within the USDA's Daily Food Guide.

II. List guidelines to follow in writing market orders.

III. Demonstrate simple table settings and services.

IV. Identify kitchen utensils and tools and describe their use and storage.

V. Identify hygienic and safety practices to follow in food preparation and storage.

VI. List ways to use and conserve various forms of energy in simple procedures.

VII. Plan and prepare nutritious snacks and refreshments.

IX. List job opportunities in food related occupations at the entry level.

LEVEL I

UNIT OUTLINE

I. Nutrition
A. Food Facts and Functions
1. USDA's Daily Food Guide
4. Nutrients, Functions and Sources
II. Consumer Practices
C. Food Budget
2. Market Orders
D. Purchasing Food and Equipment
III. Meal Planning and Service (Home and Institutional)
A. Planning Meals
1. Nutrition
2. Family Needs
3. Budget
4. Time
5. Variety
6. Activities
7. Likes and Dislikes
8. Number of People
9. Age
10. Health
11. Occupation
12. Climate
C. Meal Patterns
1. Breakfast
2. Snacks
D. Eating Styles
2. Automation
F. Table Setting
1. Guidelines
2. Covers
IV. Kitchen Equipment
B. Small - Home and Institutional
1. Portable Appliances
2. Kitchen Utensils and Gadgets
4. Use
5. Care and Maintenance
6. Storage
C. Energy
1. Forms
2. Conservation
D. Safety Procedures
1. Operation
2. Maintenance
V. Sanitation and Safety (Home and Institutional)
A. Sanitation
1. Standards and Laws
4. Clean-up
B. Safety
1. Standards
2. Laws

VI. Management (Home and Institutional)
    A. Energy (Human) Conservation
        1. Mental Attitude
        4. Work Sequence
    B. Time Conservation
        1. Use
        2. Schedules
        3. Effect on Family Relations
    C. Work Simplification
        1. Time and Labor Saving Devices
        2. Dovetailing Tasks
        3. Job Analysis
        4. Attitudes
    D. Organization of Kitchen
        1. Layout
        2. Centers and Work Areas
        3. Arrangement of Equipment
        4. Storage Areas
        5. Group Cooperation

VII. Food Preparation
    A. Weights and Measures
    B. Recipe Use
    C. Equipment
    D. Basic Preparation
        2. Beverages
        8. Convenience Foods
        9. Cookies
        14. Fruits
        17. Milk
        21. Sandwiches

VIII. Food Preservation
    A. Home Preservation
        4. Use of Preserved Foods

IX. Food Related Occupations
    A. Types of Food Service Jobs
        1. Entry Level Jobs
        2. Technical or Skilled Jobs
        3. Supervisory Jobs and Requirements
        4. Management Jobs and Requirements
        5. Self-employment

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. NUTRITION	NAME THE GROUPS IN THE USDA'S DAILY FOOD GUIDE.
A. Food Facts and Functions	List the groups in the USDA's Daily Food Guide and the amounts needed.
1. USDA's Daily Food Guide Milk and milk products Meat, poultry, fish Vegetables and fruits Breads and cereals Fats, sweets and alcohol*	-Show filmstrip or slides on snacks. -Look in the textbook to find a Basic Four Food Chart.* -Discuss foods in each group and collect pictures from magazines. -Mount pictures to be used in a class presentation. Examples would be a mobile, collage or poster (save extra pictures for use in a later lesson). -Evaluate by listing on the board the four groups and the number of servings needed daily. -Make a poster or bulletin board to place in the school cafeteria to coincide with State FHA Nutrition Project.
4. Nutrients, Functions and Sources Carbohydrates Proteins Fats Minerals Vitamins Water	Define nutrients and list three functions of food in the body. -Discuss reasons for eating: a. energy (Go) b. growth and repair (Grow) c. health and body regulation (Glow) -Explain why food gives energy, growth, and good health (nutrients in food). -Name ways that good health is reflected in one's appearance. -Define nutrients. -List nutrients on the board. -Direct a search to find which nutrients are provided by each group. -Consult weight charts according to age and sex and compare with current body weight. Evaluate future weight goals.

-Play "Nutrition Password Game."
-Evaluate by using bulletin board or poster entitled "Train to Good Health" with boxcars entitled "Go," "Glow," and "Grow."
-Load the boxcars with pictures of foods from the four groups.

*Currently revised and referred to as the USDA's Daily Food Guide which elaborates on a fifth group -- fats, sweets and alcohol.

II. CONSUMER PRACTICES

   C. Food Budgets

      2. Market Orders

   D. Purchasing Food

LIST GUIDELINES TO FOLLOW IN WRITING MARKET ORDERS.

Make a grocery order for a specific breakfast menu.

-Recite ways labels may be helpful when shopping for food and discuss.
-Place the letters -- LOOK at the LABEL -- on a bulletin board.
-Hand out labels removed from cans, boxes, packages and wrappers. List information which can be found on labels.
-Collect and place labels on the bulletin board.
-List forms in which foods are available (fresh, frozen, canned, and dehydrated).
-Discuss factors that would determine which form to buy.
-Name foods that can be purchased in these forms.
-List information needed in a grocery order (food, quantity, and form).
-Bring newspaper ads to school to compare prices -- make a grocery order using ads to figure what the meal will cost.
-Write on the board a grocery list for a simple breakfast menu using foods for which recipes can be found in the textbook.
-Make a breakfast menu and write a grocery list for the group.

Concepts and Subconcepts

III. MEAL PLANNING AND SERVICE (Home and Institutional)

A. Planning Meals

1. Nutrition
2. Family needs
3. Budget
    - Income
    - Amount allowed
4. Time
5. Variety
    - Kinds of food
    - Color
    - Size and shape
    - Texture
    - Flavor
    - Method of preparation
    - Forms
6. Activities
7. Likes and dislikes
8. Number of people
9. Age
10. Health
11. Occupation
12. Climate

Behavioral Objectives, Learning and Evaluation Experiences

DEMONSTRATE SIMPLE TABLE SETTINGS AND SERVICE.

Identify factors involved in planning meals, referring to nutritional needs and how food is used by the body.

-List factors to be considered before planning menus.
-List all foods eaten for a day.
-Select several students to write on the chalkboard their list of foods eaten.
-Evaluate lists using the factors listed previously on board.
-Exchange lists and evaluate as to what foods need to be excluded or included in food plans.
-Collect pictures of colorful combinations of foods served at breakfast, parties, or snack foods.
-Recall lunch room menus, discuss why they may have been selected.
-Bring to class your family's favorite menu and discuss reasons for the choice and the food function it would serve.
-Collect recipes for foreign dishes that Americans like.
-Evaluate by preparing an unusual dish at home and serve to class members.
-Discuss foods that are served at certain times of the year and why.
-Make a checklist of likes and dislikes of foods.
-Evaluate choices.
-Plan a menu as a class. Ask the cafeteria manager to serve it to the school one day.
-Invite cafeteria manager to class to explain why the foods are served as they are and to explain career requirements.

C. Meal Patterns

1. Breakfast

Define meal patterns for breakfast.
-Write an example on the chalkboard of a light, a medium, and a heavy breakfast.
-Make a list of foods that are eaten for breakfast.
-Make a menu for breakfast using the meal pattern examples written on the board.
-Evaluate by writing several menus on the chalkboard with mistakes in the menus.
-These could also be placed on a ditto.
-Identify and correct errors.

4. Snacks

Define meal pattern for simple snacks.
-Select pictures and make posters or bulletin board of favorite snacks.
-Discuss the nutritional value of each snack and the function it serves.
-Select a special occasion and plan appropriate snacks.

D. Eating Styles

2. Automation

Explain how automation affects food choices.
-Discuss food careers or part-time jobs for teenagers in these areas.
-Discuss different ways automation affects food choices. Example:

delicatessen
cafeteria
fast food
vending machine
concession stand

-Select a situation using the above list and role play selection of snack or meal.
-Evaluate according to RDA and principles of menu planning.
-Take a field trip to an automated food establishment.

F. Table Setting

Demonstrate simple table settings and service for snacks and breakfasts.

1. Guidelines

-Find pictures in magazines of breakfast settings. Arrange a display of different table settings.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
2. Covers	-Using a breakfast menu written on chalkboard ask for a volunteer to select the needed items and set the table. -Demonstrate the correct table setting of a cover for a specific menu. -List rules for setting a table. -Draw and label diagram of a cover. -Create a bulletin board, "Look at That Set." -Demonstrate appropriate table arrangements for breakfast. -Evaluate with a mock service using the actual utensils for a menu. -Describe duties of host, hostess, and guest. -Evaluate by role playing each for a specific occasion. -Provide table appointment appropriate for serving snacks. -View filmstrip, "Table Setting and Manners." -Suggest or demonstrate attractive ways of decorating a table. -List manners to remember when entertaining and being entertained. -Role play different occasions -- assign each group a menu and occasion.
IV. KITCHEN EQUIPMENT	IDENTIFY KITCHEN UTENSILS AND TOOLS AND DESCRIBE THEIR USE AND STORAGE.
B. Small -- Home and Institutional	Identify kitchen utensils and gadgets as to use, care and storage.
1. Portable Appliances Selection Use Care	-Arrange a display of appliances. -Have a buzz session on an appliance and answer these questions: How often will it be used? How many uses does it have?

Storage
Kitchen placement

Will storage be a problem?
Is it stored and cared for easily?
Will special wiring be needed?
Will it add interest to snacks and meals?
Will it save time and energy?
How much electrical energy does it use?

-Make an oral report on portable appliance use and selection.
-Apply the above principles to the appliances assigned.

standard mixer
blender
hand mixer
food processor
electric knife
deep fat fryer
pop corn popper
electric skillet

Use portable appliances wisely.

-Demonstrate the use of one of the small appliances .

Example: blender - fruit juice
mixer and electric skillet - cake
electric knife - sausage pinwheels
pop corn popper - cheese popcorn

Care for portable appliances properly.

-List five reasons why the use and care manual should be read.
-Write a paragraph explaining how the knowledge of the information in the use and care manual will extend the usefulness of appliances.
-Conduct a buzz session with the use of manuals. Demonstrate the use of assigned appliance.
-Prepare snacks using tested recipes recommended in the use and care manual.
-Invite a home economist from a utility company to demonstrate use and care of appliances in the home economics department.
-Tour the cafeteria to see large appliances used in the kitchen.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	Identify work centers in the kitchen. -List and describe the work centers in a kitchen. Food storage center; Serving center Preparation center; Cleaning center Cooking center -Take a tour of lab and identify work centers. -Identify and explain the use of portable appliances and equipment in each work area. -Discuss the storage of appliances in each work center. Demonstrate how time and energy can be conserved with proper arrangements. Evaluation: Pre-test -- Identify numbered items in display of appliances. Post-test -- Oral -- Select and describe the proper use of assigned appliances.
2. Kitchen Utensils and Gadgets Measuring Mixing Cutting and chopping Baking pans and oven dishes Top of range Serving	Review work centers in the units. -Refer to the text in order to determine the appropriate storage of utensils and gadgets. -Rearrange utensils and gadgets for the desired result.

4. Use
5. Care and Maintenance
6. Storage

Identify utensils and gadgets in food storage and preparation center.

-Utensils on display for cabinet storage.

mixing bowls
scraper
beater
forks
knives
measuring cups
measuring spoons
spatula
scissors
fruit reamer
strainers
cutters
mixing spoons
graters
cookie sheets
flour sifter
salad bowl
baking pan
casseroles
can and bottle openers
chopping bowl and knife
food grinder
pastry blender
pastry brush
rolling pin

Identify utensils and gadgets at cooking and serving center.

-Utensils and dishes for cabinet storage.

breadbox
skillets
forks, long handled
knives
spoons
measuring cups
measuring spoons
pancake turner
spatula
strainer
chicken fryer
griddle
covers
serving dishes
coffee maker
teakettle
teapot and strainer
cooling racks
ladle
potato masher
roaster
tongs
deep-fat fryer

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences

Identify cleaning center utensils and gadgets.

-Utensils on display for storage.

Vegetable cutting board	Shears (kitchen)
Towel rack	Sink strainer
Draining rack	Colander
Dishpan	Double boiler
Scraper	Strainer
Garbage container	Vegetable slicer
Knives	Apple corer
Saucepans	

-Play "Name That Utensil" Game.
Lay out various gadgets on a table at one end of room. Tape colored strips on the wall opposite the table. Have 2 or 3 students stand at the wall with the tape. As the teacher calls out the name of a gadget, the students will race to the table, pick up correct gadget, race back, and remove a colored strip. The group with the most strips wins.

Identify tools used for measuring ingredients.

-Refer to text concerning tools for measuring ingredients.
-Discuss why standard measuring tools should be used for measuring ingredients (include metric utensils).
-Identify measuring tools on display as described in textbook.
-Differentiate between the cups used for measuring liquids and those used for measuring dry ingredients.
-List the types of materials from which measuring cups are made.
-Prepare a display or bulletin board (chart) of metric equivalents.
-Support measuring techniques with rules stated in the textbook.
-Describe a set of measuring spoons (sizes, shapes, etc.).

	-List the types of materials from which measuring spoons are made. -Identify the utensils on display. -Explain the purpose of each item identified. -Distinguish between utensils used in the oven and those for surface use. -Sponsor an FHA project "Better Kitchen Management" to encourage students to improve kitchens for conserving time and energy.
C. Energy	List ways to use various forms of energy in simple procedures.
1. Forms Manual Gas Electrical Solar	-Define energy. -Relate energy to homemaking practices. -Identify the forms of energy used in homemaking department. -Explain importance of energy conservation. -Discuss possible sources of energy to be used in the future. -Prepare a display board with newspaper articles, pamphlets, and brochures on energy.
2. Conservation	Select methods of energy conservation.
	-Interpret the phrase "energy conservation." -State reasons for energy conservation. -Explain energy conservation practices observed in individual homes.
D. Safety Procedures	Compile a list of safety procedures.
1. Operation 2. Maintenance (see sanitation and safety)	-Demonstrate how to repair an electrical plug. -Invite a representative from the local power company to explain how to read the electric meter and gas meter. -Take a field trip to a neighboring house to look at utility meters.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
V. SANITATION AND SAFETY (Home and Institutional)	IDENTIFY HYGIENIC AND SAFETY PRACTICES TO FOLLOW IN FOOD PREPARATION AND STORAGE
A. Sanitation	Dress properly for work in the kitchen.
1. Standards and Laws	-List suggestions for proper grooming while working in the kitchen. (Note: providing a ball of yarn is a quick, easy way for tying hair back -- chef hats from fast food chains are fun for boys.)
Personal hygiene Individual rules Personal appearance Food handling	Demonstrate good personal habits in the kitchen.
Work areas Cleaning schedules Cleaning methods Storage of supplies Individual responsibilities	-Suggest the following personal habits. Turn head away from food when sneezing and coughing. Wash hands after using and disposing of tissue. Never comb hair in the kitchen. Use a "tasting spoon" and never return it to food. Avoid touching face or hair when preparing food in kitchen. -Describe duties and responsibilities during lab experience.
Regulations Private Government Storage Staples Perishables	Store food properly. -Decide when and how a list of foods would be stored. Examples are onions and ice cream. -Demonstrate reasons for proper food storage. Moisten bread. Place it in a closed container in a warm place several days. Leave a piece of celery of carrot uncovered and one in a closed plastic bag overnight and check for crispness. -Evaluate by listing general rules to remember when storing foods.

4. Clean-up	Apply efficient clean-up procedures.
Dishwashing Methods and procedures Types of cleansers	-List clean-up suggestions on board or give out "handout sheets." -Select an "inspection team" for each laboratory session. -Make a poster with steps to follow in clean-up procedure for each area.
Laundry Methods and procedures Special treatment Surface areas	Wash, dry and store dish towels and linens properly. -Demonstrate use of washer and dryer. -Designate proper storage of dish towels and linens.
B. Safety	Practice kitchen safety rules.
1. Standards 2. Laws	-Discuss kitchen accidents. Relate experiences, decide the cause of of the accident, and how it might have been prevented. -Conduct a "Hazard Hunt" to point out unsafe practices that have been planted in a "roped off" kitchen using items such as these: paper or pot holder near a burner; pot handle turned toward the front of a range; coffee pot cord across a burner, walk-way, or sink of water; unlabeled bottles containing poisonous cleansers under the sink; metal spoon left in cooking pot; water or food spilled on floor; several electrical appliances plugged into one outlet; cleaning fluid on cabinet near range; cabinet door left open. -Make a list of safety rules. -Discuss why each safety rule is important. -Demonstrate the use of the fire extinguisher. -Discuss the escape route and the instructions to follow for fire drills and fires. -View 3M Instructional Unit "Safety in the Kitchen" transparencies. -View filmstrips or films on Kitchen Safety. -Make attractive "Kitchen Safety" Posters for posting at home as an FHA Safety Awareness Project.

Concepts and Subconcepts | Behavioral Objectives, Learning and Evaluation Experiences

VI. MANAGEMENT

LIST WAYS TO USE AND CONSERVE VARIOUS FORMS OF ENERGY IN SIMPLE PROCEDURES

A. Energy (human) Conservation

Demonstrate a positive attitude toward work.

1. Mental Attitude

-Discuss the following case studies and determine which one is
(1) probably the more enjoyable experience
(2) a job better done
(3) less tired as a result of the task.

Case A: Tom wakes up early on Saturday morning, changes his sheets, straightens clutter, vacuums and puts his room in good order.

Case B: Patty sleeps late. Mother comes in and reminds her that she needs to get up and clean her room. Patty sleeps a little longer and Mother comes to remind her again. The phone rings so she talks on the telephone until Mother reminds her again that she needs to get her sheets in the wash. Reluctantly she hangs up and makes the bed. With further prodding from her mother she vacuums, picks up and finishes her cleaning.

-Share experiences that illustrate feeling good about a job well done.
-Discuss how a good attitude makes a job easier and how to move in an orderly, deliberate direction with work.
-Define management -- (using what we have to attain something we want or need).
-Explain how a positive attitude toward new methods and equipment may ultimately save time.
-List resources which need to be managed (energy, time, money).

4. Work Sequence

-Discuss how making a list of jobs before beginning work might save you energy.
-View a film, filmstrip or transparencies on "Kitchen Management."
-Evaluate by developing with class a work sequence chart which can be used for work in the kitchen.

B. Time Conservation 1. Use 2. Schedules 3. Effect on Family Relations	Develop a time schedule for efficient work. -Make a work sequence chart assigning approximate time allotments for each job so that total time equals class period. -Discuss why time management contributes to better relationships at home and in the foods lab. -Give examples of time management and discuss which is best.
C. Work Simplification 1. Time and Labor Devices 2. Dovetailing Tasks 3. Job Analysis 4. Attitudes	Recognize how correct choice and use of equipment saves time, energy and money. -Conduct a "carrot peeling" contest; compare the length of time. finished product, and efficiency of a vegetable peeler, paring knife, butcher knife, and steak knife. -Relate management to well organized work centers and storage areas. -Use case studies to illustrate the value of cooperation in management.
D. Organization of Kitchen 1. Layouts 2. Centers and Work Areas 3. Arrangement of Equipment 4. Storage Areas 5. Group Cooperation	Identify basic principles of organization of a work area. -List basic kitchen shapes. -Name work centers and discuss tasks performed in each center. -Illustrate the principle that "Items are stored at point of first use."

VII. FOOD PREPARATION	READ AND USE A RECIPE
A. Weights and Measures	Read and use a recipe.
B. Recipe Use	-Take a pretest on abbreviations, equivalents, and cooking terms. -Experiment with measuring equipment: Common English measures and equivalents used in cooking Metric measures used in cooking Water displacement -Develop a chart of equivalents and abbreviations.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Identify cooking terms in recipes utlizing one of the games below: Directions for Game #1 -- Put cooking terms on left side on index card with the definition on right hand side. Cut the card in half jig-saw fashion so that definition and cooking terms are separate. Give each student a puzzle piece as he enters class. Find in text the other part of his puzzle. Then, find the person who has the matching term. Allow students to read the cooking term and definition. Directions for Game #2 -- Prepare a deck of playing cards. Half of cards will contain cooking terms, half definitions. Shuffle and spread face down. First player turns over two cards. If cards match, he turns over two more. If cards do not match, he turns them over in the same place. Next player tries, and so on. Person with most pairs wins. (Variation.) Prepare an additional card "You Are No Cook." Shuffle and deal all cards. Discard matches. Player to the left of the dealer draws from the player to his left, again discarding matches. Continue around the circle. First person out of cards wins. Person left holding "You Are No Cook" is the loser.
C. Equipment	Choose correct equipment for given task. -Discuss the equipment needed to perform cooking tasks.
D. Basic Preparation	Identify and prepare nutritious beverages suitable for serving as snacks and party refreshments.
2. Beverages	-Compile a list of hot and cold beverages suitable for serving with snacks and party refreshments. Categorize into nutritious and non-nutritious beverages.

Classification Hot Cold	-Prepare and serve samples of fresh, reconstituted or frozen fruit beverage. -Find recipes for milk-based beverages. -Select a beverage to be prepared in class. (Shakes, malts, hot cocoa, lemonade.) Others may be prepared later with snacks.
Principles of Preparation Method of Preparation Temperature Control	-For departments with limited space and funds, prepare a beverage from scratch that also may be prepared from a convenience package such as (1) hot cocoa prepared by adding milk or water to the packaged mix; (2) lemonade made from fresh and from frozen and powdered concentrates. With this plan you combine preparation of a beverage and preparation of convenience food. -List principles to keep in mind for preparing and serving beverages which are: served at correct temperature, very cold or piping hot, well-blended, rich flavor, not too strong, or weak.
8. Convenience Foods	Recognize and prepare convenience foods.
Classification Ready-to-eat Heat and Serve Mix and Bake	-Define "convenience" food. -List foods which might be classified as convenience foods. -Share ideas for creative uses of convenience foods. -List advantages and disadvantages of using convenience foods. -Choose convenience foods to be prepared in class. Make variation with:
Economics Quality vs. Time Consumption	canned biscuits - sweet rolls, doughnuts crescent rolls - sausage pinwheels, minipizza mixes - cake mix, slice and bake with variations; cupcakes, cookies.
Cost vs. Energy Required	
9. Cookies	Classify and prepare different types of cookies.
Classification Drop Rolled Refrigerator or sliced Molded Pressed Bar, sheet, or spread	-Discuss favorite kinds of cookies, list on board, classify into specific types. -View filmstrip on cookie making (Betty Crocker). -Look at cookie recipes and compare ingredients (Crisco Baking Kit). -Demonstrate recipe for cookies and emphasize general principles relating to: preparing time schedules, selecting proper equipment, measuring correctly, preheating oven, preparation of pans and oven placement, and proper storage of cookies according to type.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Methods of mixing and baking	-Select recipes to prepare. -Package some of the cookies and deliver to residents as an FHA project. -Note: When limited equipment for cooking is available, consider measuring one day, mixing and baking one day, serving the next.
Variety of ingredients	
Principles of preparation Care and storage Starch cookery Sugar cookery	
14. Fruits	Classify common fruits.
Classification Fresh Frozen Canned Dried Cooked	-List on chalkboard various forms in which fruit can be purchased. -Give examples of each form. -Review nutrients found in fruits. -Identify fruits that are in season. -Find pictures of different fruits and bring to class. -Participate in a fruit parade sharing information about the fruit chosen or assigned. -Bring a form of the fruit chosen/assigned and give its advantages and disadvantages.
Methods of cooking Bake Boil or stew Broil Fry Glaze Preserve	Describe methods of preparing fruit. -List different cooking methods on chalkboard. -Classify pictures of fruits according to preparation methods (posters, bulletin board).

Principles of preparation Care and storage	Explain principles of preparing fruits. -Discuss principles to be considered when preparing fruits. Expose to air as little as possible since vitamins are lost. Cut fruit discolors easily unless coated with citric acid or juice. Cooked fruits spoil less easily, digest more easily, add variety. Adding sugar preserves shape and color. Little difference in food value between fresh, frozen, and canned. -Describe care techniques. Avoid bruising. Store at correct temperature. Cover cut foods and juices for storage. Wash fresh fruits carefully before eating. -Demonstrate care and storage of fresh, frozen, canned fruit. -Prepare fruits for a tasting party with fresh fruits in season, and/or different forms of fruit. -Prepare a fruit salad. Cut up fresh fruit. Pour an orange cola drink over fruit and refrigerate.
17. Milk	Recognize available forms of milk.
Forms Fluid Solid Classification Raw Fresh Processed: Pasteurized Homogenized Canned Dehydrated	-Define different forms of milk and nutrients provided. -Identify different forms of milk in a display. -Taste the different forms of milk. -Bring cartons, packages, labels of different forms of milk to make a display (may be obtained from the milk company).

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Principles of preparation	Apply principles of milk cookery.
Protein cookery	-Discuss principles of milk cookery.
Care and storage	-Discuss and demonstrate scalding milk using low heat. Prepare cocoa or other beverage using instant mix following principles defined. (Good place for using metric measure.)
	-Prepare an instant or cooked pudding mix that requires milk.
21. Sandwiches	Identify types of sandwiches appropriate for different occasions.
Classification	-Find pictures and group according to each classification.
Hearty or main dishes	-Discuss guidelines for selecting the appropriate sandwiches for a particular occasion.
Accompaniment	
Refreshment	
Principles of preparation	Apply principles of preparing and storing sandwiches.
Construction principles	-Demonstrate a variety of sandwiches.
Handling	-Practice spreading, cutting, and wrapping sandwiches.
Wrapping	-Plan, prepare, and pack a picnic lunch for class.
Care and storage	-Discuss precautions for storing sandwiches.
	-Prepare sandwiches for a tea party. Consider inviting guests (mothers, faculty).
	-Plan and prepare refreshments for an FHA meeting.

VIII. FOOD PRESERVATION	FOOD PRESERVATION
A. Home Preservation	Identify methods of preserving food.
4. Use of Preserved Food	-Discuss two methods that could be used for home preservation of food (canning, freezing). -Compare the taste of a frozen and canned product (peaches or apples). -Taste homemade jams and jellies, or other available canned food.

IX. FOOD RELATED OCCUPATIONS	IDENTIFY PERSONAL JOB INTEREST AND QUALIFICATIONS NEEDED. ANALYZE PERSONAL QUALIFICATIONS. COMPLETE A JOB APPLICATION. LIST REASONS FOR JOB NEEDS.
A. Types of Food Service Jobs	Identify personal job interest and qualifications needed.
1. Entry Level Jobs	-List food related occupations in the community. -Classify as technical or skilled jobs.
2. Technical or Skilled Jobs	-Identify supervisory and management jobs in individual job preferences. -Invite lunchroom manager to discuss job requirements in that area.
3. Supervisory Jobs and Requirements	Identify personal job interest and qualifications needed.
4. Managment Jobs and Requirements	-Contact guidance person concerning information on individual job interest to compile: educational preparation, salary, and availability.
5. Self-Employment	Analyze personal qualifications.
	-List the qualities that will help you get and keep a job. -Compare personal qualifications with the list compiled in class. -List necessary changes, or write a paragraph. -List reasons for job needs. -Fill out an application for employment. -Take a field trip to employment office - fast foods chain. -Set up an FHA sponsored booth at the parish fair featuring "Foods Related Occupations."

RESOURCE UNIT FOR CONSUMER AND HOMEMAKING

LEVEL II

LEVEL II
Food and Nutrition

Objectives for Level II are designed for the ninth and tenth grade students or Home Economics I and II, according to the developmental tasks which the students might be expected to perform. Adjustments may need to be made according to the individual needs of students.

Level II provides for flexibility in selecting subconcepts, objectives, experiences and evaluation devices. Learning experiences are varied for different learning abilities. FHA/HERO activities have also been suggested in learning activities which may be incorporated into the class. Since the materials in this guide are by no means inclusive, other objectives, learning experiences and evaluation devices that will make this level more meaningful may be added to meet the present and future needs of pupils.

Overall Objectives:

After the completion of this unit, the student will be able to:

Plan, prepare, serve and evaluate food products and procedures used in the preparation of breakfasts.

Describe job opportunities in food related occupations at the entry level.

Behavioral Objectives:

I. Evaluate nutritional value of simple meals using the USDA's Daily Food Guide.

II. Discuss the government agencies, laws and assistance programs, advertising, food budgets, and equipment.

III. Plan, prepare, serve, and evaluate breakfast meal patterns and eating styles for meeting individual needs.

IV. Identify small kitchen equipment, safety procedures and the various forms of energy.

V. Demonstrate sanitation and safety during preparation and clean-up.

VI. Illustrate the wise use of energy and time with emphasis on kitchen organization and work simplification.

VII. Plan, prepare, serve, and evaluate the basic breakfast preparations.

VIII. Plan, prepare, serve, and evaluate simple meals.

IX. Apply basic principles in freezing food.

X. Describe food related occupations at the entry level.

LEVEL II

Unit Outline

I. Nutrition
  A. Food Facts and Functions
    1. USDA's Daily Food Guide
    2. Caloric Requirements
    4. Nutrients, Functions and Sources
  B. Current Issues and Concerns
    1. Habits
    2. Fads and Myths
    4. Nutrition - Health Problems
  C. Special Dietary Needs
    2. Pregnancy and Lactation
    3. Weight Control
    7. Adolescence
II. Consumer Practices
  A. Government Agencies, Laws and Assistance Programs
    [illegible]. Assistance Programs
  B. Advertising
    1. Types
    2. Benefits
    3. Effects
    4. Persuasive Techniques
  C. Food Budgets
    1. Food Purchases
    2. Market Orders
  D. Purchasing Food and Equipment
    1. Factors Affecting Cost
    5. Equipment
  E. Eating Out
    1. Advantages and Disadvantages
    2. Types of Establishments
III. Meal Planning and Service (Home and Institutional)
  A. Planning Meals
    1. Nutrition
    2. Family Needs
    3. Budget
    4. Time
    5. Variety
    6. Activities

        7. Likes and Dislikes
        8. Number of People
        9. Age
        10. Health
        11. Occupation
        12. Climate
    C. Meal Patterns
        1. Breakfast
        7. Packed Lunches
    D. Eating Styles
        2. Automation
        4. Lifestyles
        5. Eating Out
    E. Special Dietary Needs
        6. Weight Control
        7. Pregnancy and Lactation
    F. Table Setting
        1. Guidelines
        2. Covers
        3. Appointments
        4. Decorations
    G. Table Service
        1. Types
        2. Techniques
    H. Table Etiquette
        1. Values
        2. Principles and Guidelines
IV. Kitchen Equipment
    B. Small - Home and Institutional
        1. Portable Appliances
        2. Kitchen Utensils and Gadgets
        3. Selecting and Purchasing
        4. Use
        5. Care and Maintenance
        6. Storage
        7. Kitchen Placement
    C. Energy
        1. Forms
        2. Conservation
    D. Safety Procedures
        1. Operation
        2. Maintenance
    E. Technological Advances
V. Sanitation and Safety (Home and Institutional)
    A. Sanitation
        1. Standards and Laws
        3. Food Spoilage
    B. Safety
        1. Standards
        2. Laws
VI. Management (Home and Institutional)
    A. Energy (Human) Conservation
        1. Mental Attitude
        2. Physical Influences
    B. Time Conservation
        3. Effect on Family Relations
    C. Work Simplification
        1. Time and Labor Saving Devices
        2. Dovetailing Tasks
        4. Attitudes
    D. Organization of Kitchen
        2. Centers and Work Areas
        3. Arrangement of Equipment
        4. Storage Areas
        5. Group Cooperation
VII. Food Preparation
    A. Weights and Measures
    B. Recipe Use
    D. Basic Preparation

    - 2. Beverages
    - 3. Breads
    - 7. Cheese
    - 8. Convenience Foods
    - 9. Cookies
    - 11. Eggs
    - 12. Fats and Oils
    - 14. Fruits
    - 15. Grain and Grain Products
    - 17. Milk
    - 21. Sandwiches
    - 25. Sweeteners

VIII. Food Preservation
  - B. Economics Aspect
    - 1. Freezing

IX. Food Related Occupations
  - A. Types of Food Service Jobs
    - 1. Entry Level Jobs

LEVEL II (Grades 9 and 10)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. NUTRITION	EVALUATE NUTRITIONAL VALUE OF SIMPLE MEALS USING THE USDA DAILY FOOD GUIDE.
A. Food Facts and Functions	Review USDA Daily Food Guide.
1. USDA daily Food Guide Milk and milk products Meat, poultry, fish Vegetables and fruits Breads and cereals Fats, sweets, and alcohol	-Categorize a list of foods into proper food groups. -Evaluate individual meals according to the Basic Four Food Groups. -List all foods eaten for one day, determine the number of servings represented from each food group, and determine deficiencies.
2. Caloric Requirements	Determine caloric needs by the RDA Chart. -Define the terms "calorie" and "calorimeter." -List some "empty calorie" foods. -Compile a list of low and high calorie foods. -Evaluate foods eaten for a period of time for caloric intake. -List five factors which influence caloric need and give examples of each (sex, age, activity, body build, metabolism). -Interpret the caloric requirements for each age level.
4. Nutrients, Functions and Sources Carbohydrates Proteins Fats Minerals Vitamins Water	Name the six nutrients, give their functions, sources, and deficiencies. -Research and report on deficiencies of each nutrient. -Collect good sources of nutrients and prepare a chart or poster to share in class. -Determine minimum requirements for each nutrient by using the RDA Chart. -Review by playing "Nutrition Password."

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
B. Current Issues and Concerns	Describe factors which contribute to changes in food habits and practices of families.
1. Habits	
Family Attitudes Income Culture Religion Locale Availability	-Take an attitude test and identify various factors which influence choices. -Research and report on ways in which family food customs are influenced by the following: geographic location, superstitions, religious beliefs, availability, social activities, foreign influences, economics, technological advances. -Collect newspaper articles on trends in the development of foods. -Determine nutritive value of favorite snack foods.
Personal Nibbling Overeating	-List the effects the following habits have upon a person: overeating, meal skipping, fad diets, snacking.
Teenage Meal Skipping Snacking Fad Dieting	
2. Food Fads and Myths	Define the meaning of "food fad" and "fad diet."
"Magic" Diets	-List food myths and fads in a brainstorming session. -Discuss the influence of advertising on eating habits. -Collect fad diets from current magazines and evaluate. -Write reports on the following deficiencies and disturbances: night blindness, goiter, rickets, anemia, scurvy, beri-beri, pellagra.
4. Nutrition - Health Problems	Analyze problems encountered in providing nutrition for the populations of the world.

Food Sources Food Scarcity World Health Organization	-List some recent developments that are being made to counteract the world food shortages -Define W.H.O. and give its functions.
C. Special Dietary Needs	List special dietary needs and relate effect of food habits on personal nutrition.
2. Pregnancy and Lactation	-Describe a diet suitable to follow during pregnancy and lactation, considering these factors: caloric intake, amount of milk, vitamin D, minerals. -Compare the nutritional requirements of teenage pregnancy to that of adult pregnancy. -Explain why it is important for a pregnant woman to use the Basic Four Daily Food Guide and the advice of her physician in planning her diet.
3. Weight Control	Research and report on food fads and weight control. -Invite a representative to speak on weight control for teenagers. -Determine average weight in the English and metric system according to age, sex, and body build by using the height-weight chart. -Identify underweight, average, and obese categories and plan menus to meet the caloric needs of these groups.
7. Adolescence	Examine factors which influence nutritional needs of youth, and determine the possible effects of diet on youth. -Draw pictures or make collages showing results of inadequate diet. -Role play an adult criticizing teenagers for what they eat and list possible reasons for criticism.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
II. CONSUMER PRACTICES	DISCUSS GOVERNMENT AGENCIES, LAWS, AND ASSISTANCE PROGRAMS, ADVERTISING, FOOD BUDGETS, AND EQUIPMENT.
A. Government Agencies, Laws, and Assistance Programs	Specify various assistance programs and their benefits.
3. Assistance Programs Food Stamps Benefits Qualifications Programs, Federal, State and Local	-Invite a guest speaker from the Food Stamp office to discuss qualifications and benefits of the program. -Secure copies of the school lunch policies and review qualifications for participation. -Evaluate the school's breakfast program to determine whether 1/3 of the daily requirements are met. -Secure information from the local family services agency on various food assistance programs. -Distribute pamphlets and leaflets on various programs in the community. (FHA/HERO Activity)
B. Advertising	Evaluate advertisements according to accuracy and relevancy of information stated.
1. Types Television Newspaper Coupons Word of Mouth 2. Benefits 3. Effects 4. Persuasive techniques	-Discuss various forms of advertising and tell how each influences the homemaker's choice of food. -Collect newspaper ads and discuss the types of appeals used. -Compare the prices of several food items in stores that give trading stamps to those where stamps are not given. Give conclusions. -Devise an advertisement for a food product, present it to the class and determine the effectiveness of the ad. -Research careers in advertising.
C. Food Budgets	List guidelines to follow in making budgets and writing market orders.
1. Food Purchase	-Discuss advantages and disadvantages of various methods of buying.

2. Market Orders	Summarize principles of good shopping. -Present a one-minute skit on shopping discourtesy and courtesy. -Summarize ways in which consumers can add to the cost of food. -Plan menus for three days on a given budget using newspaper ads. -Construct an organized market order. -List advantages of a market order. -Devise a form which can be used for market orders.
D. Purchasing Food and Equipment	Name and describe factors affecting the purchase of food.
1. Factors Affecting Cost Form Availability Display Techniques Culture Weather Transportation Labor Importations Attitudes	-Compile a list of factors which contribute to the cost of food. -Identify the forms of food and compare cost. -Formulate a chart with fresh foods which are available during each season. -Take an attitude test and then determine how this would affect the cost of food. -Report on factors which influence food cost. Culture Labor Weather Importation
5. Equipment	Name and describe factors affecting the purchase of equipment.
Large Small Utensils and Gadgets Surface Cooking Oven Cooking Mixing Storage Institution	-Examine equipment in unit kitchens and identify correctly. -Set up standards for choosing small and large equipment for the kitchen. -Tour the lunchroom and observe the use and care of food service equipment. -Report on the use and care of equipment in the kitchen. -Invite a home economist from a utility company to demonstrate use and care of large equipment in the department. -Compare microwave cooking to conventional.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
E. Eating Out	Evaluate the types of eating establishments and list the advantages and disadvantages of each.
1. Advantages and Disadvantages 2. Types of Establishments Drive-ins Restaurants Sandwich Shops	-Compare the cost of a meal eaten out in different establishments to one prepared at home. -Secure copies of menus from different types of establishments and evaluate in terms of cost, form and nutritive value. -List menu terms and definitions.
III. MEAL PLANNING AND SERVICE	PLAN, PREPARE, SERVE, AND EVALUATE BREAKFAST MEAL PATTERNS AND EATING STYLES FOR INDIVIDUAL NEEDS
A. Planning Meals	Plan meals that meet the nutritional needs of all family members.
1. Nutrition 2. Family Needs 3. Budget Income Amount Allowed 4. Time 5. Variety Kinds of Food Color Size and Shape Texture	-Plan breakfast menus and packed lunches using given meal patterns. -Evaluate recent changes in eating styles. -Apply the basic rules for table setting and service to practical situations. -Describe and practice rules for manners and etiquette for simple meals. -Read a reference on meal planning and identify principles of menu planning. -Develop a list of guides to use when planning meals such as family needs, time available, Basic Four, food on hand, health, occupation, budget, activities, and climate. -Plan specific meals using the above guide.

Flavor Methods of Preparation Forms 6. Activities 7. Likes and Dislikes 8. Number of People 9. Age 10. Health 11. Occupation 12. Climate	-View mini-filmstrips on meal planning for different occasions. -Make a poster for classroom display showing attractive meals. -Prepare meal for family at home and write an evaluation to share with class. -Suggest ways a basic menu may be varied to meet the needs of a mother who is a secretary, a father who is a truck driver and a son who plays football. -Write menus that would be especially appropriate for winter, summer, spring, and fall.
C. Meal Patterns	Use meal patterns to plan breakfast menus and packed lunches.
1. Breakfast	-Summarize the importance of a good breakfast. -Find out what part of the daily food requirement should be met at breakfast. -View filmstrip, "Breakfast for B.J." -Select a basic meal pattern for breakfast. -Prepare a list of foods commonly used for breakfast. -Make a survey of breakfast habits of the students within the school. -Compile and display the results on a poster in the lunchroom. -Using the basic meal pattern, plan a light, a medium and a heavy breakfast. -Evaluate the meals planned to determine if each food group is represented. -Sponsor a breakfast for the faculty. (FHA/HERO)
7. Packed Lunches	Describe various types of packed lunches. -List characteristics of foods for a packed lunch. -Name food from the following categories that would be suitable for a packed lunch: Sandwiches, Sweets, Fruits, Relishes, Vegetables -Observe a demonstration on how to wrap a sandwich. -Plan a special picnic lunch.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
D. Eating Styles 2. Automation 4. Life-styles 5. Eating Out	Evaluate recent changes in eating styles. Tell how eating styles are influenced by automation and lifestyles. -Compare the types of services available from fast food chains. -Describe the types of services that are commonly used in homes. -Research and give advantages and disadvantages of eating out.
E. Special Dietary Needs	Refer to Levels I and III, # 6 and 7.
F. Table Setting 1. Guidelines 2. Covers 3. Appointments 4. Decorations Types Guidelines Materials Used	Apply the basic rules for table setting to practical situations. -Define these terms: cover, dinnerware, holloware, flatware, linens, and glassware. -Identify the appointments used in table setting. -Give an oral report on the history and development of table appointments. -Demonstrate test for determining quality of materials used for dinnerware, glassware, and silver. -Take a field trip to a local store. Emphasize the quality features to look for when selecting dinnerware, glassware, flatware, and linens. -List and discuss basic rules for setting a table, followed by a demonstration. -Set up a place setting, using the appointments in class, for a menu described by the teacher. -Prepare a display board using examples of table settings suitable for various occasions. (FHA) -Use transparencies to review rules for table setting. -Set up standards for appropriate table decorations. -Arrange centerpieces using available materials.

	-Collect pictures of attractive table settings. Evaluate in terms of the types of meals they may be used for. -Compile a list of items and materials that can be used for centerpieces. -Invite a florist to give a demonstration on floral arrangements to use as table decorations. Summarize the principles used.
G. Table Service	Apply the basic rules for table service to practical situations.
1. Types 2. Techniques	-Identify and define the various types of meal service: family, formal, buffet. -List the factors which determine the type of meal service used. -Practice serving a meal using the different types of services. Discuss the advantages and disadvantages of each. -Describe the correct way to serve and remove beverages and food from a table. -View transparencies on proper arrangements of foods on a buffet table.
H. Table Etiquette	Describe and practice rules of etiquette for simple meals.
1. Values 2. Principles and Guidelines	-Define etiquette. -Devise a list of rules for good manners. Chart rules that are most frequently followed. -Give examples to support statements that table courtesies can make a meal pleasant and lack of courtesies can make a meal unpleasant. -View filmstrip on table etiquette. -Make a list of finger foods, spoon foods, and fork foods. -Illustrate ways values may influence table etiquette.

LEVEL II

Concepts and Subconcepts	Behavioral Objectives, Learning, and Evaluation
IV. KITCHEN EQUIPMENT B. Small	IDENTIFY SMALL KITCHEN EQUIPMENT, SAFETY PROCEDURES AND VARIOUS FORMS OF ENERGY.
1. Portable Appliances Selection Use Care Storage Kitchen Placement	Demonstrate use and care of appliances. -Invite a home service advisor to present information on a variety of small portable appliances available today. -Locate and identify portable appliances in the department. -Research and make oral reports on selection and care of appliances. -Read appliance manuals and discuss. -Compile a list of rules to follow for use and care of small appliances. -View filmstrip on care of kitchen equipment. Discuss procedures observed in film. -Sponsor an FHA/HERO "Electric Project."
2. Kitchen Utensils and Gadgets Measuring Standard Metric Mixing Cutting and Chopping Baking Pans and Oven Dishes Top of Range Serving	Identify and explain the use of all utensils and gadgets in the kitchen. -List small kitchen equipment. (Brainstorm) -Summarize small equipment into lists: one that is basic to all kitchens and the other that may be desirable, but added later. -Give examples of equipment that may serve more than one purpose. -Clip illustrations from magazines and newspapers of cooking and baking utensils made of different materials. Make a flip chart or poster listing advantages and disadvantages of each. -Demonstrate preparation of food in utensils made of different materials. Discuss the advantages and disadvantages of the materials.
3. Selection and Purchasing	Demonstrate use of equipment. -Bring to class a piece of equipment which you feel is unique. Show the class how it works.

4. Use 5. Care and Maintenance 6. Storage 7. Kitchen Placement	-Visit the housewares department of a dime store to study the merits of the various kitchen gadgets. -Have a scavenger hunt. Use equipment list and write location of each utensil and tool within the home economics kitchen. -List rules on chalkboard for care and maintenance. -Describe ways to improvise equipment. Examples: smooth bottle for rolling, glass for biscuit cutter.
C. Energy	List the forms of energy used in the home and suggest methods of conserving time.
1. Forms Manual Gas Electric 2. Conservation	-List equipment that uses each kind of energy. -Debate: Gas vs. Electric cooking. -Research new developments in solar energy using a resource person or special reports.
D. Safety Procedures	Demonstrate safety procedures in the use and care of appliances and utensils.
1. Operation 2. Maintenance	-Compile a list of safety precautions to take when using small appliances. -Demonstrate and explain correct procedure when using equipment. -Post a list of safety rules near each unit kitchen. -Locate first aid supplies in the department and learn to use them for cuts and burns. -Write safety jingles and slogans. -Set up a "Hazard Kitchen" and have a contest to determine who can list the largest number of hazards in the shortest period of time.
E. Technological Advances	Show awareness of technological advances in kitchen equipment.
	-Research and report recent technological advances related to food. (Sources: local, state, and federal health departments, county extension office, and state agricultural university.) -List examples of food products resulting from advances in food technology

Concepts and Subconcepts	Behavioral Objectives, Learning, and Evaluation Experiences
V. SANITATION AND SAFETY	DEMONSTRATE SANITATION AND SAFETY DURING PREPARATION AND CLEAN-UP.
A. Sanitation	Identify hygienic and safety practices to follow in food preparation and storage.
1. Standards and Laws	
Personal Hygiene	-Define sanitation, contamination, hygiene, hazard. -Read several texts about the aspects of kitchen sanitation. -View transparencies on "Sanitation in the Kitchen." -Discuss personal cleanliness in food preparation. (buzz groups) -Discuss the importance of proper dress and personal grooming during food preparation. -Distinguish between sanitary and unsanitary practices to follow when handling food. -Set up a schedule for daily sanitary procedures.
Work Areas Cleaning Schedules Cleaning Methods Storage of Supplies Individual Responsibilities Regulations Private Government Storage Staples Perishables	Plan an efficient method for cleaning up after lab classes to save time and energy. -Outline the types of pretreatments recommended for cleaning pots and dishes. -Locate stained pots in the department and demonstrate stain removal. -Describe proper procedures for loading the dishwasher. -Give steps for washing dishes by hand. -Point out simple sanitation practices for storing staples and perishables. -Discuss the similarities in standards for sanitation for a person who operates a private institution and one who operates a government institution.

3. Food Spoilage Causes Indications Preventions	Recognize causes of food spoilage. -Research and report on cases of illnesses which have been caused by unsanitary conditions. -Compile a list of foods that spoil easily. -Outline the types of bacteria which cause food spoilage and characteristics of end results. -Discuss common causes of food spoilage. -Compare the relationship of food spoilage to food storage. -Observe samples of spoiled food and determine the possible cause of each. -Interview a science teacher concerning causes of food spoilage. -View spoiled foods under a microscope. (molded cheese)
B. Safety 1. Standards 2. Laws	Evaluate situations for proper hygienic practices and safety hazards. -Discuss and demonstrate safety practices in the kitchen. -Assign reports to be followed by applicable demonstrations or skits on preventing fires, burns, cuts, falls, and electrical shocks, and on controlling fires. -List rules on safety. -Invite the physical education teacher to give demonstrations on first aid treatments. -Research safety laws which govern institutions. -Prepare and display safety signs in various locations of the foods laboratory. (FHA/HERO) -Review rules for safety and sanitation by the use of filmstrip. -Report on laws enforced by local, state and federal government to promote safety and sanitation. -Demonstrate the use of a fire extinguisher.

LEVEL II

Concepts and Subconcepts	Behavioral Objectives, Learning, and Evaluation Experiences
VI. MANAGEMENT	ILLUSTRATE THE WISE USE OF ENERGY AND TIME WITH EMPHASIS ON KITCHEN ORGANIZATION AND WORK SIMPLIFICATION.
A. Energy	
1. Mental Attitude	Demonstrate methods of conserving energy.
2. Physical Influence	-Define management, decision making, organization, time, energy, ecology. -List ways of conserving natural and personal resources. -Make a visual display showing ideas on how to save fuel in the home. -Collect reusable cartons or containers for storage purposes.
B. Time Conservation	Demonstrate the ability to prepare and serve food within a given time to allow for family activities.
3. Effect on Family Relations	-Interview family members to determine their attitudes toward time spent on housekeeping tasks. -Summarize results of interviews and formulate a list of procedures to follow in dovetailing these tasks. -Plan a time schedule, outlining the tasks to be performed by each family member. After one week of using the trial schedule report on the effects of time schedules on family relations.
C. Work Simplification	Organize and simplify meal preparation. -Research and make a list of time and labor saving devices.
1. Time and Labor Saving Devices	-Demonstrate time and labor saving devices. -Demonstrate time and labor saving devices as compared to conventional devices. Evaluate in terms of time conserved.
2. Dovetailing Tasks	-Define dovetailing and brainstorm ways this can be accomplished. -Demonstrate the use of a food processor and other time-saving equipment.
4. Attitudes	-Judge each piece of equipment for its time and energy saving features.

-Observe a comparative time and energy management demonstration in the preparation of cookies.
Situations: Have a time-work schedule with all ingredients and equipment assembled.
Have only recipe at hand.

D. Organization of Kitchen

Evaluate kitchen arrangements in relation to management.

2. Centers and Work Areas
3. Arrangement of Equipment
4. Storage Area
5. Group Cooperation

-Find illustrations depicting different kitchen arrangements and explain reasons for the locations of specific work area, food storage and preparation center, cooking and serving center, and cleaning center.
-List utensils and equipment that are likely to be found in each center.
-Rearrange the utensils and small equipment in the home for more efficient use.
-List some ways of improvising storage in an older kitchen.
-Select and store a utensil in an appropriate work center.
-Organize into working groups.
-Prepare a chart with individual responsibilities for each group and member.

VII. FOOD PREPARATION

PLAN, PREPARE, SERVE AND EVALUATE BASIC BREAKFAST PREPARATIONS

A. Weights and Measures

Demonstrate the use of various measurements and equivalents of recipes.

-Describe different methods of measuring ingredients: Standard/ English System, Metric System.
-List measuring tools and utensils.
-Identify the divisions of each standard and metric utensil.
-List abbreviations and equivalent measurements.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Match utensils to their correct use. -Demonstrate techniques for measuring flour, small amounts of ingredients, liquids, shortening, granulated sugar, confectioner's sugar, and brown sugar. -Define the terms: Recipe, standard or tested recipe, ingredient, yield. -Illustrate the parts of a recipe. -Discuss advantages and disadvantages of the ways recipes are written. -Compile a guide to use in judging well-organized recipes.
B. Recipe Use	Interpret and use a recipe effectively. -Evaluate recipes for clarity. -Group cooking terms into mixing, cutting, or cooking techniques. Define and demonstrate where applicable. -Examine cookbooks, magazines, and newspapers that feature recipes and make a list of cooking terms that appear in meat, bread, cake, and milk recipes. -Explain procedures used for increasing and decreasing a recipe. -Increase and/or decrease a given recipe.
D. Basic Preparation	Prepare a variety of beverages and serve correctly.
2. Beverages Classification Hot Cold	-Collect recipes of hot and cold beverages and classify these into categories of tea, coffee, milk, fruit, carbonated, or vegetable.
Principles of Preparation Method Variation Temperature Control	-Exhibit containers that are appropriate for maintaining the serving temperature of beverages and explain features of each. -Discuss the principles of preparing beverages.

	-Prepare hot and iced tea using ball, bag, and instant mix. Compare time of preparation and flavor of each. Varieties may be accomplished by the use of spices, mint, herb, and orange. -Compare the cost and flavor for different methods of making coffee: perked, dripped, boiled, instant, and vacuum. -Invite FHA/HERO parents in for coffee and dessert followed by a program. -Prepare a variety of milk beverages and have a tasting party. -Prepare and serve fruit beverages in the form of punch, frappes, ices. -Experiment with a variety of garnishes. -Demonstrate the preparation of an appetizer beverage from a variety of vegetable and fruit combinations.
3. Breads	Identify and prepare several types of quick breads utilizing the appropriate cooking techniques.
Quick Classification Batter Dough Yeast Principles of Preparation Formation of Gluten Leavening Mixes Care and Storage	-Make a list of the four types of quick breads and classify according to the amount of liquid used. -Match the ingredients used in making bread to its proper function. -Describe the "biscuit" and "muffin" methods of mixing bread. -View filmstrip on "muffins" and "biscuit making." -Display bread mixes and discuss advantages and disadvantages of each. -Differentiate between "quick" and "yeast" breads. -Perform an experiment on the basic reaction of a leavening agent when combined with a liquid. -Prepare biscuits and muffins with variations. -Prepare a recipe which uses biscuits as dessert. Example: cobblers, turnovers, and deep dish pie or short cake. -Prepare at least one of the following bread products: waffles, pancakes, biscuit, muffin, coffee cake, fritters, or doughnuts. -Demonstrate the preparation of a pizza by the use of a mix for the crust at an FHA/HERO meeting.
7. Cheese	Prepare a product using cheese.
Classification	-Classify cheeses and give examples of each.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Moisture content Soft Semi-hard Hard Flavor Unripened Ripened Processed or pasteurized Cheese spread Principles of preparation Protein cookery Temperature control Cooking time Combined with other foods Care and storage	-Taste, smell, and feel samples of hard, semi-soft and soft cheeses. -Compare the flavor and odor of cheeses. -Investigate the forms in which cheese is available. -Discuss the principles of cheese cookery. -Select recipes and prepare dishes using cheese as the main ingredient.
8. Convenience Foods	Prepare a dish using convenience foods which will conserve time and energy.
Classification Ready to eat Heat and serve Mix and bake Economics Quality vs. time consumption Cost vs. energy required	-Read several resources and determine the forms in which convenience foods may be purchased. -List the advantages of using convenience foods. -Visit a local grocery and compare prices on different brands of selected convenience items. Summarize your comparisions. -Describe ways to add variety and creative touch to convenience food products. -View filmstrip, "Convenience Creations." -Compare the quality, time, cost and energy required in the preparation of a convenience food and the same dish prepared "from scratch."

9. Cookies	Prepare creative cookies of many varieties with nutritious ingredients.
Classification	-Collect cookie recipes and classify into the six types.
Drop	-View "Cookie Craft" filmstrip and answer the following questions:
Rolled	What are the basic ingredients needed for making cookies?
Refrigerator or sliced	What is the function of each of these ingredients?
Molded	How are these ingredients mixed?
Pressed	What facts should be remembered when baking cookies?
Bar, sheet, or spread	-Select recipes for a different type of cookie to prepare.
Methods of mixing and baking	-Compare the taste and consistency of each type. -Demonstrate ways to pack cookies for storage and mailing.
Variety of ingredients	-Prepare and serve fancy cookies for FHA/HERO Christmas Party.
Principles of preparation	
Care and storage	
Starch cookery	
Sugar cookery	
11. Eggs	Gain knowledge of nutritional value of eggs.
Functions	-Label the parts of an egg and list nutrients.
Thickening	-Develop a word list of terms associated with eggs, such as yolk, collagen, albumen, air cell, coagulate, thickening, binding, coating, emulsifying, clarifying, leavening, and garnish.
Binding	
Coating	
Emulsifying	-Discuss factors to consider when purchasing eggs.
Clarifying	-List grades of eggs.
Leavening	-Purchase different grades of eggs. Break and evaluate the internal characteristics.
Garnishes	
Forms	-List principles of egg cookery.
Grades	-Explain the proper storage of eggs.
Size	
Weight	
Condition	
Principles of preparation	
Protein cookery	
Temperature	
Cooking time	

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Care and Storage	
Methods of cooking	Prepare eggs or foods containing eggs.
Fry	-Demonstrate temperature control and cooking time.
Poach	-Prepare egg dishes by various methods of cooking.
Bake	
Scramble	
Boil	
12. Fats and Oils	Apply principles of proper use of fats and oils.
Classification	-Read material on fats and oil.
Vegetable	-Classify fats and oils by setting up a display.
Margarine	-Visit the supermarket and have students list fats and oils available and record the cost.
Shortening	
Oils	-Heat various brands of fats and oils recording the smoke point of each.
Animal	-Discuss basis for selection of proper fats for specific purpose.
Butter	
Lard	
Principles of preparation	Prepare foods with fat as the major ingredient.
Temperature	-Prepare mayonnaise using different kinds of oil. Evaluate the taste and cost.
Care and storage	-Prepare piecrust varying the shortening agent. Evaluate the final products.
	-Discuss the care and storage of fats and oils.
14. Fruits	Prepare individual fruits and dishes using fruit as the main ingredient.

Classification
- Fresh
- Frozen
- Canned
- Dried
- Cooked

Methods of Cooking
- Bake
- Boil or stew
- Broil
- Fry
- Glaze
- Preserve

Principles of preparation
- Care and storage

-Visit a large grocery store, have students identify the forms in which fruits are available. Make a flip chart indicating the kinds of fruits and the forms in which each is available.
-Compare the unit price of each of the forms for selected fruits.
-Review the nutritive value of fruit.
-Select recipes from newspaper or magazines for fruit dishes prepared by different methods, compare in class. As a group, choose one of the recipes to prepare in class.
-Have students create a salad or dessert from a variety of uncooked fruits.
-Prepare a display board with pictures depicting ways in which fruits can be served, e.g., appetizers, salad, snack, and dessert.
-Determine the best times to buy each fruit.
-Select a label from a display of canned, fresh, frozen and dried fruit, and describe how the fruit should be stored.

15. Grains and Grain Products

Apply appropriate techniques in preparation of products with a grain component.

Classification
- Corn
- Wheat
- Rice
- Oats

Principles of preparation
- Starch cookery

-Define the terms cereal, kernel, ready-to-eat cereals, cooked cereals, pasta, granule, enriched, restored, converted, refined, cellulose, gelatinization.
-Prepare a chart using actual samples of grains: rice, oats, barley, rye, corn, wheat, etc. Compare these for similar traits.
-Cut a cross section of a large grain. Identify the parts and functions. Discuss what nutrients each contributes to the body.
-List the basic principles of starch cookery.
-Prepare rice by boiling and steaming. Compare flavor, texture, and consistency.
-Prepare and serve a breakfast cereal.

17. Milk

Prepare milk products using principles of protein cookery.

Forms

-Identify the forms of milk by matching terms with definitions.

LEVEL II

Concepts and Sub-Concepts	Behavioral Objectives, Learning and Evaluation Experiences
Fluids	-Set up display of forms of milk available.
Solids	-Demonstrate how to make hot cocoa with dry milk. Discuss cost factor in using different forms of milk.
Classification Raw Fresh	-Survey milk intake of a group for the last 24 hours. Evaluate according to the requirements of the Basic Four. Plan ways to increase intake, if needed.
Processed Pasteurized Homogenized Canned Dehydrated	-Selecting milk dishes to be prepared, apply the principles of milk cookery by film or scum formation, boiling over, scorching, and curdling to pudding, custard, white sauce.
21. Sandwiches	Prepare different types of attractive sandwiches for various occasions using appropriate garnishes.
Classification Hearty or main dish Accompaniment Refreshment	-Read criteria for making sandwiches in text. -Compare the kinds of breads and fillings used for sandwiches. -Prepare a display board using pictures illustrating different breads and fillings.
Principles of Preparation Construction techniques Handling Wrapping	-Demonstrate the preparation of dry and moist fillings, focusing on tools and utensils used, and on the proper procedure for cutting bread. -Prepare a display of sandwich accompaniments and garnishes. -Prepare and store sandwiches. -Arrange sandwiches attractively for different occasions.
25. Sweeteners	Identify and use various sweeteners in the preparation of products.
Classification Natural Artificial	-Prepare a display of natural and artificial sweeteners in various forms. -Read labels on containers and discuss principles of use. Compare amounts to use and the cost of each.

Forms
    Liquid
    Cubes
    Powdered
    Granulates

Principles of use

-Prepare a simple beverage using natural sweetner in one portion and artificial sweetener in the other. Compare taste.
-Determine the nutritive value of beverages studied.

VIII. FOOD PRESERVATION

    B. Economic Aspects

        1. Freezing

APPLY BASIC PRINCIPLES IN FREEZING FOODS

Illustrate techniques, special precautions and containers necessary for freezing foods. Prepare a bulletin board, "Freeze It Right."
    -Invite a local county agent to demonstrate methods of freezing.
    -Debate the pros and cons of home freezing.
    -Prepare a vegetable or fruit in season for freezing by a method that was demonstrated.
    -View filmstrip, "Keeping Food Fit: Storing and Freezing."
    -Determine the best time to buy foods for freezing.
    -Compute the energy consumption of the home freezer.

IX. FOOD RELATED OCCUPATIONS

    A. Types of Food Service Jobs

        1. Entry Level Jobs

DESCRIBE FOOD RELATED OCCUPATIONS AT THE ENTRY LEVEL

List job opportunities at the entry level in the area of foods.
    -Display food and nutrition career pamphlets to examine and determine job opportunities.
    -Invite counselor and food service managers for a career session.
    -Examine newspaper advertisements for job opportunities in food service or related occupations in local area.
    -View filmstrip, "Career in Food Service."

RESOURCE UNIT FOR CONSUMER AND HOMEMAKING

LEVEL III

LEVEL III
Foods and Nutrition

The learning experiences of the Level III unit, Foods and Nutrition, are designed so the participant can evaluate foods for their nutritional content and apply nutritional information to dietary needs. Consideration has been given to the homemaker as a consumer. In the area of food related occupations, the degree of training and personal characteristics required for employment at several levels is presented.

Overall Objectives:

After the completion of this unit, the student will be able to:

Plan, prepare and serve luncheons and simple meals in meeting individual needs.

Describe the training and personal characteristics necessary for food related occupations.

Behavioral Objectives:

I. Explain caloric requirements, current issues related to nutrition, and special dietary needs.

II. Describe the effects of government agencies, legislation and assistance programs upon consumers in purchasing food and equipment.

III. Plan, prepare, serve and evaluate simple meals to meet individual and family needs.

IV. Demonstrate kitchen equipment with emphasis on safety procedures and the conservation of energy.

V. Apply sanitation and safety regulations in kitchen or lab.

VI. Illustrate the importance of management of energy, time, and work simplification in the kitchen.

VII. Apply principles of food preparation.

IX. Describe the training and personal characteristics necessary for food related occupations.

LEVEL III

UNIT OUTLINE

I. Nutrition
    A. Food Facts and Functions
        2. Caloric Requirements
        3. Recommended Daily Allowances
        4. Nutrients, Functions and Sources
    B. Current Issues and Concerns
        2. Fads and Myths
        3. Additives and Preservatives
    C. Special Dietary Needs
        2. Pregnancy and Lactation
        3. Weight Control
        5. Children
        6. Infants
II. Consumer Practices
    A. Government Agencies, Laws and Assistance Programs
        1. Consumer Protection Laws
        2. Agencies
        3. Assistance Programs
    B. Advertising
        1. Types
        2. Benefits
        3. Effects
        4. Persuasive Techniques
    C. Food Budgets
        1. Food Purchases
        2. Market Orders
        3. Price Comparison
        4. Income
        5. Meal Planning
        6. Comparative Shopping
    D. Purchasing Food and Equipment
        1. Factors Affecting Cost
        2. Grading
        3. Packaging
        4. Stores
        5. Equipment
    E. Eating Out
        1. Advantages and Disadvantages
        2. Types of Establishments
        3. Financial Considerations
        4. Physical and Psychological Aspects
        5. Lifestyles
        6. Gratuities
III. Meal Planning and Service (Home and Institutional)
    A. Planning Meals
        1. Nutrition
        2. Family Needs
        3. Budget

4. Time
5. Variety
6. Activities
7. Likes and Dislikes
8. Number of People
9. Age
10. Health
11. Occupation
12. Climate

B. Menu Writing
   1. Form
   2. Terms

C. Meal Patterns
   2. Lunch
   3. Supper

D. Eating Styles
   1. Meal Types
   3. Mobility
   4. Lifestyles

E. Special Dietary Needs
   1. Infants
   2. Children
   3. Adolescents

F. Table Setting
   3. Appointments
   4. Decorations

G. Table Service
   1. Types

H. Table Etiquette
   1. Value
   2. Principles and Guidelines

IV. Kitchen Equipment

B. Small - Home and Institutional
   1. Portable Appliances
   2. Kitchen Utensils and Gadgets
   3. Selecting and Purchasing
   4. Use
   5. Care and Maintenance
   6. Storage
   7. Kitchen Placement

C. Energy
   1. Forms

D. Safety Procedures
   1. Operation
   2. Maintenance
   3. Installation

E. Technological Advances

V. Sanitation and Safety (Home and Institutional)

A. Sanitation
   1. Standards and Laws
   3. Food Spoilage
   4. Clean-up

B. Safety
   1. Standards
   2. Laws

VI. Management (Home and Institutional)

A. Energy (Human) Conservation
   3. Analysis of Tasks
   4. Work Sequence

B. Time Conservation
   3. Effect on Family Relations

C. Work Simplification
   1. Time and Labor Saving Devices
   2. Dovetailing
   3. Job Analysis
   4. Attitudes

VII. Food Preparation

A. Weights and Measures

B. Recipe Use

C. Equipment

D. Basic Preparation
   3. Breads
   4. Cakes
   5. Candies

  - 6. Casseroles
  - 7. Cheese
  - 10. Desserts
  - 12. Fats and Oils
  - 14. Fruits
  - 15. Grains and Grain Products
  - 16. Meats
  - 17. Milk
  - 18. Pies and Pastries
  - 19. Poultry
  - 20. Salads and Salad Dressings
  - 22. Sauces and Gravies
  - 23. Soups
  - 24. Spices
  - 26. Vegetables

IX. Food Related Occupations
- A. Types of Food Service Jobs
  - 1. Entry Level Jobs
  - 2. Technical or Skilled Jobs
  - 3. Supervisory Jobs and Requirements
  - 4. Management Jobs and Requirements
  - 5. Self-Employment
- B. Training
  - 1. Vocational
  - 2. Private
  - 3. College
  - 4. On-the-Job
  - 5. Advantages of Training
- C. Factors Influencing Employment
  - 1. Characteristics for Employment
  - 2. Family Lifestyles and Availability

LEVEL III (Grades 10 and 11)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. NUTRITION	EXPLAIN CALORIC REQUIREMENTS, CURRENT ISSUES RELATED TO NUTRITION, AND SPECIAL DIETARY NEEDS.
A. Food Facts and Functions	Recall specific food facts and functions.
2. Caloric Requirements	Evaluate caloric needs of individuals. -Evaluate two lunches as to caloric content using chart in textbook. -List some low and high calorie foods. -Using above foods list, plan two days' menus either low or high in calories. -Given a normal diet, write an adaptation to meet the needs of a teenage athlete, a toddler, and a grandmother.
3. Recommended Daily Allowances (RDA)	Recognize meaning and use of RDA in diet planning.
4. Nutrients, Functions, and Sources Carbohydrates Proteins Fats Minerals Water Vitamins	Research several specific nutrients in groups for oral reports. -Present oral reports on nutrients. -Find pictures of foods containing specific nutrients. -Bring to class evidence related to new discoveries in the area of nutrition. -Using examples of food and food content chart, analyze foods given as to nutrient content. -Obtain menus from three restaurants such as drive-in, coffee shop, school cafeteria, or regular restaurant. Which food selections are high in starch? Sugar? Protein?

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Research the latest information on the relationship between fats and heart disease. -Refer to menus obtained earlier. Evaluate for foods high in fat and low in fat. -Invite local health personnel to speak on cholesterol in today's diet. -Plan menus made up of animal protein and vegetable protein. -Prepare nutritional information cards and display near foods in food service area of cafeteria. -Participate in FHA Nutrition Project as part of classwork. -Research careers in Foods and Nutrition.
B. Current Issues and Concerns	Differentiate between current issues and concerns.
2. Food Fads and Myths	Recognize food fads and myths.
Magic Diets Food Cures for Disease Health Foods Sources of Information	-Compose a list from advertisements of "miracle" ways of losing weight. (e.g., candy, pills). -From the list above, evaluate some of the ways of losing weight. -Research newspapers and magazines for diet news. Prepare informative bulletin board in hall. -Define and list some common food fads (e.g., myths, cure-alls, organic foods, supplements). -Write FDA for information on pending legislation relating to food safety. -Research and report orally on a fad diet. (student teams)
3. Additives and Preservatives	Define "additive" and "preservative."
Definitions Function and Uses Effects	-Write FDA for current information on additives and preservatives. -Discuss latest findings concerning additives and preservatives as related to health.

	-Invite a medical person to discuss effects of additives and preservatives on the body.
C. Special Dietary Needs	Determine special dietary needs.
2. Pregnancy and Lactation	Evaluate diets for pregnancy and lactation. -Invite community health unit personnel to discuss WIC program to include nutritional recommendations.
3. Weight Control	Discuss weight control. -Discuss question, "Are you satisfied with your weight?" -Research to determine your ideal weight. -Discuss what causes weight problems. List on poster. -Discuss problems people have in trying to conform to the American ideal body image of tall, slender, and trim. Evaluate problems and solutions. -Have a physician or nurse discuss precautions and necessary steps in beginning a weight loss program. -Clip food ads for snacks from newspaper and magazines. Using a nutrient chart, determine calories in each food. Discuss the value this exercise has for the consumer. -Discuss how obesity affects life span. -Analyze personal eating habits. Write down suggestions for better control of eating habits.
5. Children	Identify nutritional needs of children. -Participate in talk sessions to determine how various factors influence the food needs of children. Rate findings as to most and least important factors.
6. Infants	Identify the nutritional needs of infants. -List characteristics of a well-nourished infant. -Evaluate advantages and disadvantages of breast or bottle feeding.

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
II. CONSUMER PRACTICES A. Government Agencies, Laws and Assistance Programs	DESCRIBE THE EFFECTS OF GOVERNMENT AGENCIES, LEGISLATION AND ASSISTANCE PROGRAMS UPON CONSUMER PURCHASES OF FOOD AND EQUIPMENT.
1. Consumer Protection Laws	Categorize various government agencies, laws and special programs that relate to consumer practices. -Brainstorm the question, "Why does the consumer need protection?" -Identify consumer legislation and tell what protection it offers. Consider: Truth in Lending Unfair Trade Practices Protection Laws
2. Agencies USDA FDA BBB FTC Department of Commerce	Investigate protective agencies through telephone books, library, and resource people. -List agencies that protect consumers. -Write letters to agencies asking for information on latest findings. -Research and give reports on jobs available for home economists in government agencies.
3. Assistance Programs	List agencies that provide assistance in feeding families. -Invite representative from Division of Family Services to explain various programs, e.g., Food Stamp, assistance programs, to an FHA/HERO meeting. -Review and analyze application for school lunch program. -Research child nutrition programs and programs for the elderly. -Review pamphlets from Family Services Division for total list of assistance programs.

B. Advertising	Recall methods of analyzing and evaluating advertisements.
1. Types Television Newspaper Coupons Word of Mouth	-Collect newspaper and magazine ads and coupons. Analyze these and classify as to type of ad. -Construct an ad for a food product to be critiqued by the class.
2. Benefits	List benefits derived from advertising.
3. Effects	-Write an essay entitled, "How Does Advertising Affect You,the Consumer?"
4. Persuasive Techniques	-List ways ads persuade the consumer to buy (sales, two for one, contest, free items). -Evaluate above methods and determine precautions to take for wise shopping.
C. Food Budgets	Design a food budget to accommodate all needs of the family.
1. Food Purchases	-Review decision-making process. -List reasons food purchases vary among families. -Visit several stores in your area. Select one for your regular food shopping. Why did you make your selection? -Plan a week's food choices for a single working man who lives alone, carries his lunch to work, and enjoys cooking. -Determine how much the food should cost by using food advertisements or shopping for yourself. -What percentage of his take-home pay is he spending on food? (Specify an amount for take-home pay.)
2. Market Orders	Make a market order to follow in shopping if given menus for 5 days.
3. Price Comparison	-Compare prices of three products of the same size. Which is the least expensive?

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
4. Income	List effects of income level on food budget.
5. Meal Planning	List advantages and disadvantages of planning meals before you shop.
6. Comparative Shopping	Recognize ways one might improve shopping habits to save money and energy. -Compare prices on two products in two different stores or from sale papers. Determine the best buy. -Discuss energy conservation in comparative shopping. -Consider new methods of savings for the shopper such as no-brand labels or packages.
D. Purchasing Food	Recognize characteristics of quality and economy in selecting food and equipment.
1. Factors Affecting Cost Form Attitude Availability Display techniques Culture Weather Transportation Labor Importation	-Recognize forms of food items and relate to food cost. -Determine how food attitudes of individuals affect cost. -List as many seasonal foods as possible and relate seasonal foods to cost. -Take a field trip to grocery store to note display techniques. Evaluate some advantages to shopper and cost to shopper. -Analyze cultures and how they affect food cost.

	-Prepare a chart showing various climates, and foods generally used in each area. -List advantages of shopping at one store; traveling from store to store. -Investigate the influence job availability has on food prices and increases. -Determine what foods are imported into your state and determine how this affects price.
2. Grading	Explain the purpose of grading and why is it important.
Purpose Benefits Types and Kinds Places Used Selection	-Compare various grades of canned peaches or another canned fruit as to appearance, size, uniformity, flavor, and cost.
3. Packaging	Evaluate benefits of nutritional labeling to the consumer.
Labeling Container Sizes Types	-View overhead masters of nutritional labeling and discuss. How does this help the consumer plan meals? -Invite resource person to show filmstrip or illustrated lecture on packaging of foods. -Discuss metric measure on labels. -Evaluate several labels.
4. Stores	Evaluate each type of store as to service offered.
Types Services Buying Incentives	-List types of stores in which foods are purchased. -Look at sales papers from stores and identify all buying incentives.
5. Equipment	Identify various materials from which surface and oven cookware is made.
Utensils and Gadgets Surface Cooking Oven Cooking	-Take a field trip to a store to observe all types of utensils, gadgets, and cookware. Discuss the use of each.

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
E. Eating Out	Recognize eating out as a meal pattern.
1. Advantages and Disadvantages 2. Types of Establishments Drive-in Restaurants Sandwich Shop 3. Financial Considerations 4. Physical and Psychological Aspects 5. Lifestyles 6. Gratuities	-Evaluate eating establishments as to advantage and disadvantages for the individual family. -Interview several families who eat out regularly. List the most common reasons given for eating out. -Determine types of menus most commonly used and analyze nutrition. -Classify local establishments into drive-in, restaurant, sandwich shop, fast service. Compare services in relation to costs and convenience. -List psychological aspects of eating out to the family members. -Consider how family or individual lifestyles influenced decisions to eat out. -List rules for tipping.
III. MEAL PLANNING AND SERVICE	PLAN, PREPARE, SERVE AND EVALUATE SIMPLE MEALS TO MEET INDIVIDUAL AND FAMILY NEEDS.
A. Planning Meals	Plan a meal keeping in mind all needs of the family.
1. Nutrition	Consider nutrition in meal planning.
	-Given three family situations, plan one day's menu for each family.
2. Family Needs	Evaluate menus above as to family needs, budget and preparation time.

	-Analyze according to variety, kinds of food, color, size and shape, texture, flavor, method of preparation. -Research texts for caloric requirements for various activities.
3. Budget	Plan nutritious meals for a given family on a food budget.
Income Amount Allowed	-List reasons why time is a consideration in budget planning.
4. Time	List some timesaving techniques that might be used in planning meals.
5, Variety	Recognize influence of variety on meal patterns.
6. Activities	Analyze several meals and determine suitability for inactive and very active people. -Determine individual needs in relation to daily activities. Plan three days' meals.
7. Likes and Dislikes	Relate likes and dislikes to meal planning. -Evaluate likes and dislikes of your family.
8. Number of People	Identify major differences in shopping for a large and a small family.
9. Age	Evaluate the effects of age on meal planning.
10. Health	Evaluate the effects of health on meal planning.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
11. Occupation	Describe the relationship of one's occupation to the diet.
12. Climate	Compare climates in various parts of the world. Evaluate in relation to eating habits, availability of foods, and planning meals.
B. Menu Writing	Write menus for meals using correct and appropriate form and menu terms.
1. Form	Review correct form for menu writing. -Write three lunch menus for a family of four.
2. Terms	Recognize terms by analyzing menus in textbook.
C. Meal Patterns	Recognize appropriate foods for lunch and supper. -Define "meal patterns" and discuss how they came into existence.
2. Lunch	Evaluate lunch and supper menus. Note foods which are considered characteristic of each meal pattern.
3. Supper	Explain difference in terms: lunch, dinner, supper.
D. Eating Styles	Determine why families have varied eating styles.
1. Meal Types	Recognize formal and informal meal types.
Formal Informal	-Discuss ethnic foods. Give reasons why they are considered ethnic. -Collect pictures and prepare mobiles of foods that would be appropriate for formal and informal meals.

	-Categorize menus according to formality or informality when given a list of menus. -Survey five friends to determine how many of them eat at least one meal a day with all family members present. -Compose menus for the following situations: (a) a family of eight whose relatives join them for a large holiday meal (group includes 12 adults, 6 teenagers and 5 small children) (b) a family of five who sleep late on Saturday morning (c) an older couple who entertains once a week (d) a family who eats outdoors often.
3. Mobility	Recognize influence of mobility on meal planning.
4. Lifestyles	Discuss effect of lifestyles on eating habits.
E. Special Dietary Needs	Evaluate special dietary needs of infants, children and adolescents.
1. Infants	Recognize that needs of infants are unique.
2. Children	-Prepare a chart of the daily food requirements for children and infants. -Compile a list of diseases and complications that can affect infants and children who do not receive necessary quantities of nutritious foods. -Invite local health unit personnel to come in and explain the effects of the mother's diet on the developing baby and how this continues if she breast feeds her baby. -Visit the baby food section of a supermarket and list the various types of prepared baby foods that are available. -Plan a nutritious menu for one day for (a) a child one year old, and (b) a child five years old. Evaluate nutritional content of both menus.
3. Adolescents	Research and prepare a report on the ways that food requirements change as a child grows older. -Keep an individual record of the food eaten for three days. Evaluate as to nutritional content.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
F. Table Settings	
3. Appointments	Select and arrange a variety of table appointments and decorations.
Linens Flatware Holloware Glassware Dinnerware	-Collect pictures or illustrations af all types of table appointments and display them on the bulletin board. -Display several types of flatware, glassware, holloware, and dinnerware made from different materials. (Define aesthetic.) Discuss the aesthetic quality of each one. -Collect brochures on dinnerware, glassware, and flatware. Determine the selections students would make according to income. -List the advantages and disadvantages of flatware made from silver, stainless steel, tin, pewter, and plastic. -Classify the types of materials used to produce dinnerware. -Discuss the desirable and undesirable qualities of each of the above. -Collect information on the care of all types of dinnerware, glassware, and flatware. Combine the information and make a chart to be kept in the student's notebook. -Demonstrate the types of table linens and discuss appropriate use of each type.
4. Decorations	Plan a table decoration using a form of food or a prepared food as the centerpiece.
Types Guidelines Materials Used	-Collect pictures of appropriate table decorations for (a) everyday occasions, (b) special occasions, and (c) holidays. -Bring to class some form of live greenery and an appropriate container to create a simple table arrangement.

G. Table Service	Illustrate techniques for various types of table service.
1. Types	-Discuss the different occasions when each type of table service is used correctly. (Flip Chart) -Display pictures of table settings that are appropriate for each type of table service. -Divide students into groups to demonstrate a specific type of table service. -Demonstrate ways table appointments may vary for a specific menu and style of service.
H. Table Etiquette	Express traditional values and principles of table etiquette.
1. Values	Explain the value of table etiquette.
2. Principles/Guides	Discuss principles of table etiquette. -State ways that consideration of others may be shown at mealtime. -List situations when proper table manners have been ignored. -Role play these situations and evaluate their effect on others. -Demonstrate the responsibilities of the host, hostess, and a guest by role playing.

IV. KITCHEN EQUIPMENT	IDENTIFY SMALL KITCHEN EQUIPMENT, SAFETY PROCEDURES, AND THE VARIOUS FORMS OF ENERGY.
B. Small Home and Institutional	Demonstrate the use, care, and storage of small kitchen appliances.
1. Portable Appliances	
Selection	-Develop a list of questions to ask a salesperson about a small appliance.

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Use Care Storage Kitchen Placement	-Role play a shopping trip to the appliance department in a store. -Inquire about an appliance you plan to purchase. -Demonstrate the use and care of a small appliance by preparing a food product. -Make a list of possible demonstrations using small electrical appliances for FHA Electric Project.
2. Kitchen Utensils and Gadgets	Recognize kitchen utensils and gadgets and explain the purpose of each.
Measuring Mixing Cutting and Chopping Baking Pans and Oven Dishes Top of Range Serving 3. Selection and Purchasing 4. Use 5. Care and Maintenance 6. Storage 7. Kitchen Placement	-Make a list of kitchen gadgets, utensils, and equipment that would be used in the following work areas: sink area, range area, mixing area, and serving area. -Make a list of small appliances, kitchen utensils, gadgets and equipment needed for setting up housekeeping. -Bring pictures of useful kitchen utensils and gadgets to class and place them on the bulletin board. Identify each item. -Arrange a display of all types of measuring and mixing utensils. -List the advantages and disadvantages of utensils made of aluminum, enamel, stainless steel, cast iron, tin, and plastic. -Explain the proper use and storage of each utensil. -Bring a kitchen gadget to class and explain its value in the kitchen. -Demonstrate items of kitchen equipment for cutting and chopping. -Categorize the items of equipment that were used during the demonstration.
C. Energy	Review energy issues as related to the home.

1. Forms of Energy Manual Gas Electrical Solar Nuclear Coal Bio-mass	Explain different forms of energy and state advantages and disadvantages of each. -Make a list of all the kitchen appliances and types of equipment found in the laboratory and most homes, and explain what source of energy each one utilizes. -Compare the advantages and disadvantages of electricity and gas. -Invite a salesperson from a company that deals in solar units to speak to the class on the installation costs, availability and maintenance costs of these units to the consumer. -Collect newspaper and magazine clippings on solar and nuclear energy and list advantages and disadvantages of each. -View film on energy. -Invite local personnel from gas and electric utilities companies to speak on cost, availability, and conservation of gas and electricity. -Make a list of ways consumers can conserve all types of energy in the home. Make copies of the list to be used in home and lab. -Bring news articles to class on the supply of gas and other fuels.
D. Safety Procedures	Describe safety procedures to be employed when operating and maintaining kitchen equipment, utensils and gadgets.
1. Operations	Discuss safety in the kitchen. -Make a list of accidents that occur most often in the kitchen as a result of not operating kitchen equipment properly. -Give a foods demonstration during which errors in safety are deliberately made. At the completion of the demonstration when the errors are discussed, demonstrate the correct procedure and explain why it is best. -Discuss ways in which one student's carelessness in the foods laboratory might harm another student.
2. Maintenance	Recognize that maintenance can determine degree of safety in the kitchen. -Visit the school cafeteria and observe how they operate the appliances.

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
3. Installation	-Distribute instruction booklets on various small kitchen appliances. -Read the booklets and plan a demonstration emphasizing the safe use and recommended care of the appliance.
E. Technological Advances	Acquire knowledge and evaluate current technological advances in the area of kitchen equipment. -Collect pictures of appliances that have appeared on the market in the past two years. -Make a chart and grade each appliance on its actual worth to the consumer in saving time, energy, and money using pictures collected.
V. SANITATION AND SAFETY	DEMONSTRATE SANITATION AND SAFETY DURING PREPARATION AND CLEAN-UP TO PREVENT FOOD SPOILAGE.
A. Sanitation	Identify acceptable standards of personal cleanliness and select appropriate methods for all types of cleaning in the foods laboratory.
1. Standards and Laws	Explain reason for standards and laws.
Personal Hygiene Individual Rules Personal Appearance Food Handling Work Areas Cleaning Schedule	-Compile the list of rules of good sanitation practices in the foods laboratory, concerning such laboratory phases as food preparation, appropriate dress, appearance and habits of the individuals who will be working in the laboratory. -Visit the school cafeteria to observe workers and the sanitation standards they must practice while at work.

Cleaning Methods
Storage of Supplies
Individual Responsibilities
Regulations
  Private
  Government
Storage
  Staples
  Perishables

- Discuss appropriate methods of handling a variety of foods.
- Invite personnel from the Public Health Department to speak to the class on sanitation and cleanliness requirements.
- Invite local foods service person(s) to speak on state and federal laws concerning the handling and preparation of foods and careers in Food Service.
- Distinguish between the different work areas in the kitchen and compile a list of the specific foods that will be stored in certain areas.
- Explain the different methods to use when cleaning a gas or electric oven.
- Explain the information sheet on the proper storage of perishable foods and staple items. If possible let students take turns in putting away supplies and foods when groceries are purchased.

3. Food Spoilage

Comprehend the causes, symptoms and preventive methods related to food spoilage.

Causes
Indications
Prevention

- Invite local health unit personnel or extension agent to speak on food poisoning, its symptoms, treatment and prevention.
- Prepare oral reports on different types of food poisoning.
- Observe mold that has formed on leftover foods that have remained unrefrigerated and relate these observations to food poisoning.
- Make a chart of foods that spoil easily and include methods to prevent spoilage.

4. Clean-up

Discuss relationship of clean-up to sanitation and safety.

Dishwashing
Methods and Procedures
Types of Cleaners

- List the surface materials that are found in the foods laboratory - include pots, pans, gadgets, tools, appliances, walls, cabinets, counter tops, and floor.
- List various surface types and the recommended cleaning procedure.
- Prepare a chart listing the correct methods for cleaning all areas of the foods laboratory.

LEVEL III

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Laundry Methods and Procedures Special Treatments Surface Areas	-Demonstrate the proper procedure for loading a dishwasher.. -Demonstrate the correct order for washing dishes. Discuss the logical supporting reasons. -Prepare a display of various detergents and cleaning agents used throughout the kitchen. Group items according to the area where they would best be used. -Have class prepare a commercial using three different brands of a cleaning agent. Judge the commercials on best presentation, originality and "sell quality" of the product. -Bring to class advertisements on all types of cleaners and detergents used in the kitchen. Discuss advantages and disadvantages of each one. -Demonstrate the correct method for loading and operating the washing machine and clothes dryer. -Discuss the types of laundering agents that will clean and disinfect dish towels. -Explain the reasons for using HOT water rather than cold water when washing dish cloths. -List practical clean-up procedure to be used in the following areas: sink, mixing, range, and serving. -Demonstrate the correct procedure to be used when clearing the dining table.
B. Safety	Apply general rules of safety when working in the foods laboratory.
1. Standards	Define and discuss term, "standards." -Invite local fireman to demonstrate to the class how to operate a fire extinguisher and other means for extinguishing kitchen fires.

2. Laws	Research laws dealing with safety practices that must be enforced in commercial food service industries. -Select several points connected with kitchen safety standards and rules to illustrate on posters. -Illustrate the point through use of pictures and slogans.

VI. MANAGEMENT	ILLUSTRATE THE WISE USE OF ENERGY AND TIME WITH EMPHASIS ON KITCHEN ORGANIZATION AND WORK SIMPLIFICATION.
A. Energy	Discuss energy as related to management.
3. Analysis of Tasks	Analyze tasks and evaluate use of time by learning to plan a work sequence to save time and energy. -Distribute a list of tasks to be completed in the kitchen. Perform these tasks and record time needed to complete each one. Evaluate results. Then repeat process again and evaluate. -Analyze the tasks required to complete each meal by making a list and placing the tasks requiring the most time first and tasks requiring the least amount of time last for breakfast, luncheon, and dinner menus.
4. Work Sequence	Realize importance of work sequence for energy conservation. -Distribute cookie, cake, and casserole recipes. -Plan a sequence of work for each recipe. -Plan breakfast and luncheon menus including a list of necessary tasks that will be encountered when preparing and serving each meal.
B. Time Conservation	Recognize importance of conserving time in management.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
3. Effect on Family Relations	Apply the principles of time management to allow for development of family relationships. -Given a list of tasks for a homemaker to complete, make a time schedule that will best utilize the homemaker's time so that the entire family can spend more time together. -Keep a time record for two days and evaluate the use of time. -Write suggestions for improving the use of time.
C. Work Simplification	Identify methods of work simplification and utilize these to conserve time and energy.
1. Time and Laborsaving Devices	List laborsaving devices located in the laboratory and identify tasks which they are designed to perform. -Compare several types of preparation techniques and report the time required to prepare each food using the different pieces of equipment. -Distribute a sheet of jobs that include the preparation, service, and clean-up of a meal. List jobs that can be dovetailed.
2. Dovetailing Tasks	Demonstrate the preparation of a food and point out tasks that can be dovetailed. -Share work simplification ideas with the class. -Prepare a booklet of ideas and distribute one to each class member.
3. Job Analysis	Given specific tasks, analyze sequence of steps to perform the tasks.
4. Attitudes	Evaluate the way attitudes affect the accomplishment of a task. "Most jobs get easier once you get started."

I. FOOD PREPARATION	APPLY PRINCIPLES OF FOOD PREPARATION.
A. Weights and Measures	Apply weights and measures used in the preparation of food. -Demonstrate correct procedure for measuring flour, brown sugar, liquid fat, shortening, water, bread cubes, celery slices. -Identify tools and equipment that can be improvised: jar rings for cupcake holders, lid of 4 oz. vanilla bottle is almost a teaspoon, juice cans for baking quickbreads. -Discuss situations in which one may need to improvise measuring equipment, such as basic camping. -Study various sources to make a list of food equivalents commonly used to substitute for ingredients in recipes without changing the final product.
B. Recipe Use	Effectively read and use a recipe. -Define cooking terms and methods. -View a filmstrip on cooking terms. -Divide into groups to play "Cooking Charades." Place cooking terms and methods on individual sheets of paper in a container. Each group takes turns acting out a cooking term or method which is drawn from the container. The group identifying the most terms is the winner. -Play the game, "Workers and Watchers." Workers demonstrate a cooking term or method. Watchers try to catch the Workers incorrectly performing a method or depicting a term. -Identify any unfamiliar terms in recipes.
C. Equipment	Describe small equipment needs for the kitchen. -Cite ways to organize work area, equipment and ingredients for food preparation.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Demonstrate ability to select and use proper equipment for specific recipe. -Demonstrate the use of tools for simplifying work such as mixers, nut choppers, or trays. -List small equipment needed for a basic kitchen. Categorize small equipment for establishing a kitchen and small equipment that may be desirable. -Study resources to identify materials used in small equipment construction and the characteristics of each material such as aluminum, steel, copper, glass, plastic, Teflon. -Invite home service advisor to present information on the variety of of small kitchen equipment. -Visit a department store and make a report on gadgets available.
D. Basic Preparation	Research principles and practice basic skills in food preparation.
3. Yeast Breads	Discuss nutritional value and classifications of yeast breads.
Classification	-Read about yeast breads. -Define terms, such as gluten, yeast, kneading and fermentation. -List the functions of the basic ingredients in yeast breads.
Principles of Preparation Mixing Kneading Fermenting Shaping Baking Cooking	Prepare, serve, and evaluate yeast breads. -Explain different methods of making yeast breads. -List nutrients that yeast breads provide. -Prepare yeast breads by different methods and different shapes. -Using three different pans (glass, Teflon, and aluminum) test the differences in browning and in baking time. -Prepare variations of yeast breads such as rye, raisin.

4. Cakes	Prepare and serve correctly butter, sponge and chiffon cakes.
Classification Butter Sponge Principles of Preparation Gluten formation Baking Condition Care and Storage Selection Mixes vs. Recipe Quality Price Satisfaction	-Collect pictures of cakes, and classify each type. -Discuss test for doneness for each type. -Read references on cakes to determine causes and remedies for cake failure. -Develop a word list such as: batter, gluten, leavening agent, grain, crumb, folding, inverting, crystallization, consistency. -Prepare a cake by conventional and quick methods. Compare and evaluate the results. -Discuss the care and storage of cakes. -Compare mixes and cake recipes as to quality, price and personal satisfaction. -Visit a bakery to watch the baker decorate a birthday or wedding cake. -Compare costs and quality of bakery cakes to those made at home.
Frosting (cake) Classification Cooked Uncooked Variation	Discuss the classification of frostings such as cooked, uncooked. -Demonstrate frosting a cake. -Compare canned, dry mix and homemade frosting and evaluate flavor, cost, and storage of each frosting.
5. Candies	Discuss and prepare types of candy.
Classification Crystalline Non-crystalline Variations Principles of Preparation Temperature Handling Sugar Cookery	-Define crystalline and non-crystalline candy. -List sugar cookery principles and discuss candy factors that affect quality such as temperature control, ingredients, and manipulation. -Prepare crystalline and non-crystalline candy. -Describe appropriate storage of candy.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
6. Casseroles Classification Uses Methods of Mixing	Gain knowledge of combinations of foods that may be used in casseroles. -Define Casserole. -List classifications of casseroles such as meat, meatless, vegetable and leftover. -List the advantages and disadvantages of casserole cookery. -Prepare a casserole using a white sauce to combine the ingredients. -Discuss the use of casseroles in the menu.
7. Cheese Classification Moisture Content Soft Semi-Hard Hard Flavor Unripened Ripened Processed or Pasteurized Cheese Spread Principles of Preparation Protein Cookery Temperature Cooking Time Combined with Other Foods Care and Storage	Investigate the forms of cheese available. -Visit a supermarket, list, and classify cheeses available. -Review classifications of cheese. -Review how and why cheese may be used as a meat substitute. -Prepare a recipe with cheese as the main ingredients -List the principles of cheese cookery. -Observe effects of melting cheese at high and low temperatures, compare results and draw conclusions. -Plan, prepare and serve a luncheon meal using cheese combined with other foods. -Sponsor a fondue party.

10. Desserts

Classification
  Fruit
  Milk
  Gelatin
  Frozen
  Biscuit, cake, pastry
  Egg

Principles of Preparation

Classify desserts according to ingredients and methods of preparation.

-Read reference materials on desserts.
-Develop a word list such as: consistency, scald, coagulate, curdling, pectin, sponge, sherbet, whip, cellulose, transparent, rennin, tannin, baste, fold, mousse, fruit, ice.
-List the classes of desserts according to ingredients and method of preparation.
-Classify the different kinds of milk desserts, such as puddings and custards.
-Illustrate correct principles of cooking pudding mixtures.
-Compare cost, time and taste of instant, canned and cooking pudding.
-Review rules for proper storage.
-Discuss principles to follow in making gelatin desserts. Practice adding fruit at just the right point.
-Prepare cobbler or biscuit based dessert.
-Plan menus including desserts and evaluate as to the richness, caloric value and nutritive value.

12. Fats and Oils

Classification
  Vegetable
  Margarine
  Shortening
  Oils

Animal
  Butter
  Lard

Principles of Preparation
  Temperature
  Care and Storage

Apply principles of proper use of fats and oils.

-Read material on fats and oil.
-Set up a display of fats and oils and classify by types.
-List fats and oils available at the supermarket and record cost.
-Compare quality of storebrands and nationally advertised brands.
-Heat various brands of fats and oils and record the smoke point of each.
-Discuss basis for selection of proper fats for specific purpose.
-Prepare mayonnaise using different kinds of oil. Evaluate the taste and compare cost.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
14. Fruits Classification Fresh Frozen Canned Dried Cooked Methods of Cooking Bake Boil or Stew Broil Fry Glaze Preserve Principles of Preparation Care and Storage	Analyze the nutritive contributions of fruit and discuss the available forms. -Visit the supermarket, and have students identify the forms of fruit available. Compare the price of the same fruit to various forms. -Review the nutritive value of fruit. -Have a class report on nutrition research on debated merits of Vitamin C. -Review the principles of fruit cookery and incorporate into a lab experience. -Review the care and storage of fruit.
15. Grain and Grain Products Classification Corn Wheat Rice Oats Principles of Preparation Starch Cookery	Analyze the cereal grain. -Review the nutritive value of cereal grain. -Review general classes of cereals: breakfast, pasta and flour. -Describe the methods used in cereal cookery. -Visit an Italian restaurant to learn about various kinds of pasta and how they are stored and cooked. -Laboratory experience: Have a pasta party. Prepare and evaluate each recipe.

16. Meats

Determine characteristics of each classification of meat and identify standards for judging quality.

Classification
  Beef
  Pork
  Lamb

Grading

Forms
  Fresh
  Cured
  Canned
  Frozen

Methods of Cooking
  Dry Heat
    Pan Broiling
    Broiling
    Roasting
    Baking

  Moist Heat
    Braising
    Stewing
    Simmering

  Cooking in Fat
    Deep Fat
    Pan Frying

Extenders

Principles of Preparation

-Show a filmstrip, The Story of Meat (Society for Visual Ed., Inc.).
-Develop a term and definition list: cut, beef, veal, lamb, mutton, pork, lean, connective tissue, fat, bone, steak, chop, roast, variety meats, tender cuts, less tender cuts, wholesale cuts, retail cuts, and marbling.
-Take a field trip to the meat department in the grocery store. Have the manager show how the meat arrives at the store and the steps involved before it reaches the consumer. Record prices so that cost per serving for various kinds of meat can be calculated. Look for grade and inspection labels.
-Discuss the relationship of the cost of meat to the nutritive value.
-Compare the following: 1# ground beef to 1# round steak;
  1# ground beef to 1# chicken.
-Identify the basic wholesale and retail cuts of meat.
-Identify five bones used in meat identification: T-bone, rib bone, wedge bone, round bone and blade bone.
-Using a chart or transparency of inspection and grading stamps, discuss the following: Factors used to determine meat grades.
  Purpose of inspection and grading.
-Introduce FHA Beef Project and list all suggestions for project.
-Make a survey of forms of meat available in the grocery store. Record information found on the label and evaluate.
-Invite personnel from meat market to discuss career opportunities.
-Discuss different methods of cookery.
-Discuss three methods and principles of meat cookery.
  1. Dry - pan broiling, broiling, roasting
  2. Moist - braising, stewing, simmering
  3. Fat - deep, pan.
-List different types of meat extenders and evaluate for contribution to the diet.
-Distinguish between meat extenders and meat substitutes.
-Plan three low cost meals using meat extenders as the main dish.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Protein Cookery Temperature Cooking Time	-Plan three low cost meals using meat substitutes as the main dish. -Using two meat patties of the same weight, pan broil one at a high temperature and one at a low temperature. Compare and evaluate their weight, size, tenderness and moistness.
Carving	-Laboratory experience: Plan, prepare and serve a meal consisting of a meat, vegetable or fruit, bread and a beverage. Evaluate. -View a filmstrip "All about Knives and Carving." -Discuss carving and safety precautions. -Sponsor Beef Project as FHA project.
17. Milk	Examine all forms of milk and milk to determine types, quality and nutritional value.
Forms Solids Fluids	-Set up display of forms of milk available. Determine how to make hot chocolate with dried nonfat milk. Taste and compare the cost. -Invite a person from the grocery store to discuss milk product dating and rotation.
Classification Raw Fresh Processed Pasteruized Homogenized Canned Dehydrated	-List ways to become better consumers. -Discuss the nutrients in milk. Why is milk not a perfect food? -Compare and contrast the nutritional value of skim milk, buttermilk, whole milk. Compare calories in each. -Identify and explain principles of milk cookery. -Apply principles of milk cookery to prevent film or scum formation, boiling over, scorching, curdling. -Discuss care and storage of types of milk.
Principles of Preparation Protein Cookery Care and Storage	

18. Pies and Pastry

Classification
  One Crust
  Two Crust
  Tarts
  Turnovers

Principles of Preparation
  Ingredients
  Proportions
  Mixing
  Rolling and Shaping
  Baking

Analyze different types of pastry.

- -Read references on pie dough and fillings.
- -Discuss types of pies - one crust, two crust, tarts, turnovers.
- -Review kinds of flour and shortening and decide which is best for the use of pastry making.
- -Demonstrate correct procedure for making a pie.
- -Demonstrate procedures in preparing a meringue.
- -Prepare crust by stir and roll, hot water and oil method. Evaluate the final product.
- -Discuss pie fillings and cookery principles- fruit, cream, chiffon.
- -Prepare a pastry and filling.

19. Poultry

Classification
  Chickens
  Turkeys
  Ducks
  Quail
  Geese
  Game

Forms
  Fresh
  Frozen
  Canned

Methods of Cooking
  Dry Heat
    Broiling
    Baking

  Moist Heat

Contrast the different classifications of poultry and compare the price, quality, forms and the use of each in recipes.

- -Read references on poultry cookery.
- -Discuss poultry grading, cookery, processing and storage, and methods of preparation.
- -List the forms available at the local stores.
- -Price various forms and calculate cost-per-serving.
- -Demonstrate how to cut up a chicken. Suggest ways to use meat and broth from boney pieces.
- -Discuss and practice methods of cooking and principles of cookery.
- -Display "cooking bags" and compare methods by roasting a chicken in the "bag" and one in the oven.
- -Discuss moisture retention.
- -Laboratory experience: fry chicken.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Barbecue	
Braising	
Cooking in Liquid	
Cooking in Fat	
Deep Fat	
Pan Frying	
Principles of Preparation	
Protein Cookery	
Temperature	
Cooking Time	
Moisture Retention	
20. Salad and Salad Dressing	Define and classify salads.
Classification	-Prepare bulletin board showing attractive salads.
Accompaniment	-View and discuss a filmstrip "Song of the Salad"; "What Makes a Salad Good?"
Main Dish	
	-Arrange an exhibit of salad greens available in the grocery store and demonstrate how to prepare and store.
Separate Course	
Appetizer	-Demonstrate how to cut various fruits, vegetables, and meats for salad.
Dessert	-Explain which may be sliced, chopped, diced or shredded.
	-Demonstrate the food processor.
Types of Salads	-Recognize the differences in flavored and unflavored gelatin.
Green	-Discuss procedures to follow in adding fruits and vegetables to congealed salads.
Fruit	
Vegetable	-Laboratory: preparation of salads used as an appetizer, main dish, accompaniment, dessert.
Meat, Fish, Poultry, Egg	

Gelatin Frozen Hot	-Discuss the three basic salad dressings: French, mayonnaise, cooked dressing. -Make a list of salads and decide which dressing is appropriate for each.
Salad Dressing Classification French Mayonnaise Cooked - base Variations	-Demonstrate temporary and permanent emulsions by making mayonnaise and French dressings.
Principles of Preparation Flavor and Texture Combinations Artistic Color Arrangement Care and Storage	
22. Sauces and Gravies	Define and prepare different types of sauces and gravies.
Classification Basic White Sauce Meat Gravy Brown Sauces Dessert Sauces Variations	-Read references on types of sauces and gravies. -Study recipes for different ways of using sauces and gravies. -Demonstrate basic preparation of white sauce. -Demonstrate preparation of gravy from meat drippings. -Prepare a special sauce as an accompaniment to a main dish. -Discuss principles of starch cookery.
Principles of Preparation Starch Cookery Protein Cookery	
23. Soups	Distinguish between soup and stew.
Classification Stock Base Bouillon Consomme	-Read references on types of soup. -Classify soups and give examples of stock with bouillon and and consommé, milk with cream, chowder, and stew, and fruit.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
Milk Base Cream Chowders Stews Fruit Base	-Prepare a cream soup or stew. -Compare cost, ease of preparation and quality of cream soup made from fresh vegetables, from canned vegetables and from commercially canned soup. -Review principles of protein cookery.
Forms Frozen Fresh Canned Dehydrated	
Principles of Preparation Protein Cookery Starch Cookery	
24. Spices	Describe the influence of spices on palatability of food.
Classification Herbs Extracts Acids Synthetic Substitutes	-Pass around herbs and spices to smell and taste. -Suggest foods which might be enhanced by these spices. -Discuss cooking techniques using herbs and spices. -Make a list of various forms of spices found in the grocery store. -Prepare food products and compare taste of a hamburger with and without seasoning, custard with and without nutmeg, and tomato-meat mix with and without chili powder.
Forms Fresh Dried Frozen	

Principles of Preparation Enhance Flavor Proportions	
25. Vegetables	Analyze the forms of vegetables available.
Forms Frozen Fresh Canned Dehydrated	-Name a variety of vegetables. -Look through cookbooks to find interesting recipes for preparation. -Visit the supermarket and identify the forms of vegetables available. Compare the price of the same form of vegetable. -Purchase a vegetable in as many forms as available. -Prepare and compare palatability, preparation time, and cost.
Methods of Preparation Baking Boiling Pan Frying and Sautéing Deep Fat Frying Steaming Waterless Cookery Pressure Steaming Canning	List and define methods of preparation of vegetables. -Prepare vegetables using a variety of equipment: waterless saucepan, pressure saucepan, slow cooker, wok. -Classify vegetables and discuss the storage of each. -Compare the taste, texture, appearance, and nutritional value of the same vegetables cooked with variations in cooking temperature and time, covered and uncovered. -In the laboratory, prepare green beans or carrots by the following: 1/2 cup water, 1 hour 1/2 cup water, 15 minutes uncovered 1/2 cup water, 15 minutes covered
Storage Classification Mild Strong	3 cups water, 1 hour 3 cups water, 15 minutes Compare texture, color, and taste. -In the laboratory, prepare one vegetable in a variety of ways teaching methods of preparation such as:
Principles of Preparation Temperature Time Covered or Uncovered Seasoning Color, Flavor, Texture Retention	Bake in skins, with or without foil. Cook in skins in pressure saucepan for 5 minutes and finish baking in the oven. Cook in microwave oven. Cook in skins in waterless cooker. Cook cubed potatoes in pressure saucepan. Make scalloped potatoes in oven.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	Boil potatoes. Deep fat fry potatoes. Pan fry or saute potatoes.
IX. Food Related Occupations	DESCRIBE FOOD RELATED OCCUPATIONS AT THE ENTRY LEVEL.
A. Types of Food Service Jobs	Recognize and select jobs related to foods and nutrition.
1. Entry Level	Recognize jobs available at entry level. -Discuss levels at which work begins. (i.e., graduation from high school, college.) -Entry level defined (beginning). -List some entry level jobs. -Present statistics concerning teenage employment, unemployment, high school graduates, and drop-outs. Discussion. -Analyze career orientation - making a list of personal abilities, talents, interests, and educational background. -Discuss ways to advance from entry level jobs. -View a filmstrip on foods related careers. -Interview a resource person about the jobs of waitress, hostess, and domestic.
2. Technical or Skilled Jobs	List jobs that would involve specific skills. -Discuss a level of training. -Write letter to the Council on Hotel, Restaurant and Institutional Education, Suite 534, 1522 K Street, Washington, D.C.

3. Supervisory Jobs and Requirements	Evaluate supervisory jobs.
4. Management Jobs and Requirements	Discuss management jobs. -Search classified section of newspapers for management positions related to foods.
5. Self-Employment	Recognize opportunity for self-employment. -Interview a self-employed restaurant owner. -Evaluate advantages and disadvantages.
B. Training	Evaluate jobs as to training and experience required for employment.
1. Vocational	-Invite vocational personnel to explain offerings in food areas. -Discuss advantages and disadvantages of private training such as cake decorating. -Define "apprentice." -Survey college catalogs for offerings in foods area. -List jobs where on-the-job training could be obtained. -Write an essay on the importance of training in preparation for work in the foods area.
2. Private	
3. College	
4. On-The-Job	
5. Advantages of Training	
C. Factors Influencing Employment	Analyze food related jobs in relation to availability and lifestyles.
1. Characteristics for Employment	List personal characteristics that are important for one who is employed in the foods area.
2. Family Lifestyle and Availability	Consider how employment on various levels can be influenced by lifestyle and how it can affect lifestyle.

RESOURCE UNIT FOR CONSUMER AND HOMEMAKING

LEVEL IV

LEVEL IV
Foods and Nutrition

Level IV of the resource guide for the study of Foods and Nutrition is designed for the student who has successfully completed Levels I, II, and III. The teacher will use discretion in selecting the most appropriate learning experiences from those suggested and incorporate not only her own ideas but those needs expressed by her students in teacher-pupil planning sessions. Pre-testing is recommended to aid the teacher to plan new and challenging ways to accomplish the desired objectives and meet the needs of the gifted as well as the handicapped or disadvantaged student. FHA/HERO activities should be used as an integral part of classroom instruction to obtain maximum student interest.

Overall Objectives:

After the completion of this unit, the student will be able to:

Plan, prepare and serve foods for family meals.

Illustrate the basic principles of food preservation.

Describe the types and advancement possibilities in food related occupations.

Behavioral Objectives:

I. Formulate daily food plans which meet the RDA's for individuals. Analyze current issues and concerns affecting nutrition.

II. Develop guidelines for comparative shopping with emphasis on factors affecting the cost of food and equipment.

III. Develop plans and prepare foods for family meals, dinners, and special diets.

IV. Research needs, citing advancements and regulations, relating to kitchen tools and equipments.

V. List indications of food spoilage as it relates to sanitation and safety.

VI. Analyze the effect of work procedures and the physical arrangement of the kitchen and equipment on food preparation.

VII. Illustrate the basic principles of food preservation.

VIII. Describe and explain types and advancement possibilities of food related occupations.

LEVEL IV

UNIT OUTLINE

I. Nutrition
  A. Food Facts and Functions
    3. Recommended Daily Allowances
  B. Current Issues and Concerns
    3. Additives and Preservatives
    4. Nutrition - Health Problems
    5. Food of the Future
  C. Special Dietary Needs
    1. Therapeutic
    2. Pregnancy and Lactation
    4. Senior Citizens
II. Consumer Practices
  A. Governement Agencies, Laws and Assistance Programs
    2. Agencies
    3. Assistance Programs
  C. Food Budgets
    3. Price Comparison
    4. Income
    5. Meal Planning
    6. Comparative Shopping
  D. Purchasing Food and Equipment
    1. Factors Affecting Cost
    5. Equipment
III. Meal Planning and Service (Home and Institutional)
  A. Planning Meals
    1. Nutrition
    2. Family Needs
    3. Budget
    4. Time
    5. Variety
    6. Activities
    7. Likes and Dislikes
    8. Number of People
    9. Age
    10. Health
    11. Occupation
    12. Climate
  B. Menu Writing
    1. Forms
    2. Terms
  C. Meal Patterns
    5. Dinner
    6. Special Occasions
  D. Eating Styles
    1. Meal Types
    6. Ethnic and Foreign Foods

- E. Special Dietary Needs
  - 4. Senior Citizen
  - 5. Therapeutic
  - 7. Pregnancy and Lactation
- F. Table Setting
  - 3. Appointment
  - 4. Decorations
- G. Table Service
  - 1. Types
  - 2. Techniques
- H. Table Etiquette
  - 1. Values
  - 2. Principles and Guidelines

IV. Kitchen Equipment
- A. Large - Home and Institutional
  - 1. Selecting and Purchasing
  - 2. Use and Installation
  - 3. Care and Maintenance
  - 4. Kitchen Placement
- E. Technological Advances
- F. Regulations
  - 1. Private
  - 2. Government
- G. Minimum Needs
  - 1. Large
  - 2. Small

V. Sanitation and Safety (Home and Institutional)
- A. Sanitation
  - 1. Standards and Laws
  - 2. Insect and Rodent Control
  - 3. Food Spoilage
  - 4. Clean-up
- B. Safety
  - 1. Standards
  - 2. Laws

VI. Management (Home and Institutional)
- A. Energy (Human) Conservation
  - 4. Work Sequence
  - 5. Assembly Work
- B. Time Conservation
  - 3. Effect on Family Relations
- C. Work Simplification
  - 2. Dovetailing
  - 3. Job Analysis
  - 4. Attitudes
- D. Organization of Kitchen
  - 1. Layouts

VII. Food Preparation
- A. Weights and Measures
- B. Recipe Use
- C. Equipment
- D. Basic Preparation
  - 1. Appetizers
  - 3. Breads
  - 4. Cakes
  - 5. Candies
  - 6. Casseroles
  - 7. Cheese
  - 10. Desserts
  - 11. Eggs
  - 12. Fats and Oils
  - 13. Fish
  - 16. Meats
  - 18. Pies and Pastries
  - 19. Poultry
  - 20. Salads and Salad Dressings
  - 23. Soups
  - 24. Spices
  - 25. Sweeteners
  - 26. Vegetables

VIII. Food Preservation
- A. Home Preservation

    1. Food Sources
    2. Methods of Preservation - Acid and Non-Acid Foods
    3. Methods of Preparation
  B. Economic Aspects
    3. Drying
IX. Food Related Occupations
  A. Types of Food Service Jobs
    1. Entry Level Jobs
    2. Technical or Skilled Jobs
    3. Supervisory Jobs and Requirements
    4. Management Jobs and Requirements
    5. Self-Employment
  B. Training
    1. Vocational
    2. Private
    3. College
    4. On-the-Job
    5. Advantages of Training
  C. Factors Influencing Employment
    1. Characteristics for Employment
    2. Family Lifestyles and Availability
    3. Year-Round Employment
    4. Experience
    5. Mobility
    6. Self-Employment
    7. Fringe Benefits
  D. Job Advancement
    1. Length of Service
    2. Promotion
    3. On-the-Job Training
    4. Recommendations
    5. Education
    6. Interpersonal Relationships
  E. Job Related Organizations

LEVEL IV (Grades 11-12)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. NUTRITION	FORMULATE DAILY FOOD PLANS WHICH MEET RDA'S FOR INDIVIDUALS. ANALYZE CURRENT ISSUES AND CONCERNS AFFECTING NUTRITION.
A. Food Facts and Functions	Recognize food facts and functions as needed for good health.
3. Recommended Daily Allowances	-Work in groups or individually and plan two days' menus for those of different ages. -Evaluate menus in terms of the RDA for these groups.
B. Current Issues and Concerns	List and investigate some of the common additives used in foods.
3. Additives and Preservatives	-Use reference materials and report on the purpose of additives and preservatives.
4. Nutrition -- Health Problems	-Read labels of canned, frozen, or processed foods and identify additives and preservatives. -Report on the function of the Pure Food and Drug Administration.
5. Food for the Future	Explore the environment in which man may consume food in the future.
New Food Products	-Brainstorm sources of food related to space program, underwater farming, and environmentally controlled farming.
New Food Sources	-Set up displays, depicting new sources of food that are probable by the Twenty-first Century. (FHA activity)
Technological Aspects	-Discuss organic farming, health food stores.
C. Special Dietary Needs	Recognize special dietary needs.
1. Therapeutic	-Interview or invite a food coordinator of a home for the aged or the public health nurse concerning special dietary needs.

LEVEL IV

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
2. Pregnancy and Lactation	-Choose and research one of the following. Pregnancy and lactation - complications of pregnancy Diabetes Salt free diet Low cholesterol -Select dishes for each of the above diets, prepare, and sample.
4. Senior Citizens	-Relate special dietary needs of elderly relative living with student's family and give management procedures.
II. CONSUMER PRACTICES	DEVELOP GUIDELINES FOR COMPARATIVE SHOPPING WITH EMPHASIS ON FACTORS AFFECTING THE COST OF FOOD AND EQUIPMENT.
A. Government Agencies, Laws and Assistance Programs	List government agencies, laws, and assistance programs that protect and help consumers; apply knowledge learned in real as well as hypothetical situations.
2. Agencies	-Invite a resource person involved in assistance programs in community and surrounding areas. (WIC, Food Stamps, etc.)
3. Assistance Programs	-Investigate social service agencies. Work out a bulletin board display or posters for the Food Stamp Program to be place in strategic places in the community. (FHA Activity)
C. Food Budgets	Plan meals for different levels of food spending: low, moderate, and liberal.
3. Price Comparison	-Brainstorm how a food budget can influence the selection of food.
4. Income	-Compare cost of name brands and store brands.

5. Meal Planning	
6. Comparative Shopping	
D. Purchasing Food and Equipment	Compare costs per serving for various forms of the same food: fresh, frozen, canned, etc. Discuss factors which affect choice.
1. Factors Affecting Cost	-Compare cost of a food which can be purchased already prepared, partially prepared, and made from basic ingredients.
5. Equipment	Demonstrate ability to operate and clean large and small equipment. -List features to be considered when purchasing small and large equipment.

III. MEAL PLANNING AND SERVICE	DEVELOP PLANS, PREPARE AND SERVE FOODS FOR FAMILIES AND SPECIAL OCCASIONS.
A. Planning Meals	Plan types of meals for various family situations.
1. Nutrition 2. Family Needs 3. Budget 4. Time 5. Variety 6. Activities 7. Likes and Dislikes 8. Number of People 9. Age 10. Health 11. Occupation 12. Climate	-Compare preparation with various forms and methods of cooking in relation to time available. -Prepare a tasting party to assist students in accepting a variety of foods.

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LEVEL IV

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
B. Menu Writing	Review principles of menu writing.
1. Form 2. Terms	
C. Meal Patterns	Prepare a menu for dinner and a special occasion using basic principles.
5. Dinner 6. Special Occasions	-Apply principles of correct table service in formal and informal styles by using mock service. -Discuss types of meal patterns for varied situations.
D. Eating Styles	-Discuss menus secured from ethnic/foreign restaurants. -Make poster showing regional and ethnic influences on food choices.
1. Meal Types 6. Ethnics and Foreign	
E. Special Dietary Needs	Acquire knowledge of ways to vary family meals to meet special dietary needs.
4. Senior Citizens 5. Therapeutic 7. Pregnancy and Lactation	-Name ways to meet dietary needs of the elderly. -Plan and serve meals for liquid and soft diets. -Discuss necessity of a balanced diet. ("Inside My Mom," filmstrip)
F. Table Setting	Participate in a table setting contest.
3. Appointment	-List factors to be considered when choosing dinnerware, glassware, table linen, and flatware. -Examine various types of china, glassware, linens, and flatware by visiting a local department store. -Plan a visit to a local restaurant to observe table setting and service.

4. Decoration	Demonstrate flower arranging techniques. -Collect a variety of materials and practice principles of flower arrangement.
G. Table Service	Apply principles of table service.
1. Types 2. Techniques	
H. Table Etiquette	
1. Values	-View a filmstrip on table etiquette.
2. Principles and Guidelines	-Select situations concerning table etiquette for role playing.

IV. KITCHEN EQUIPMENT	RESEARCH NEEDS CITING ADVANCEMENTS AND REGULATIONS RELATING TO LARGE KITCHEN EQUIPMENT.
A. Large Equipment	Compare the features found in major kitchen appliances.
1. Selecting and Purchasing	-Select one major appliance and be prepared to evaluate choice. -Read description from advertisements and catalogues.
2. Use and Installation	-Bring to class a warranty for a recently purchased appliance or obtain one from a local appliance dealer.
3. Care and Maintenance	-Discuss procedure for repair under warranty.
	Compare upkeep and cost factor of three different brands.
4. Kitchen Placement	Identify principles of planning work centers.
	-Show visuals on placement of kitchen appliances and work centers. -Evaluate floor plan arrangement. -Prepare a bulletin board on basic kitchen work centers. -Evaluate by teacher-made test.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
E. Technological Advances	List new types of kitchen appliances using text and resource materials. Select an appliance and report on the ease of cleaning, cost, and features.
F. Regulations	Identify regulations that provide protection for the consumer.
1. Private 2. Government	-Compile a list of government and industry regulations and analyze their effect on the consumer.
G. Minimum Needs	Determine minimum equipment needs for a beginning family.
1. Large	-Develop a checklist for minimum equipment needs including a price list. (May work in groups.)
2. Small	-Evaluate and compile these lists.
V. SANITATION AND SAFETY	LIST INDICATIONS OF FOOD SPOILAGE AS IT RELATES TO SANITATION AND SAFETY.
A. Sanitation	Review sanitation laws and standards.
1. Standards and Laws 2. Insect and Rodent Control 3. Food Spoilage 4. Clean-up	-Invite representatives from the following list to make presentations. Red Cross or School Nurse - First-aid procedures for kitchen accidents. Local Health Department - Food-borne illness, sanitation procedures, insect and rodent control, and food spoilage regulations. Police or Fire Department - Safety in the kitchen. School Lunch Manager or Supervisor - Sanitation and safety practices.

B. Safety	Review safety rules in the kitchen.
1. Standards	-View filmstrip series from the National Restaurant Association on kitchen safety.
2. Laws	-Write a report concerning laws enacted by local, state, and federal governments to ensure sanitary food practices.

VI. MANAGEMENT (HOME AND INSTITUTIONAL)	ILLUSTRATE THE IMPORTANCE OF MANAGEMENT OF ENERGY, TIME, AND WORK SIMPLIFICATION IN THE KITCHEN.
A. Energy (human) Conservation	-List the principle of energy conservation for effective management. -Prepare recipe as class members observe and evaluate use of management principles.
4. Work Sequence	Prepare a plan of work for a meal. -Discuss why the performance of tasks has an orderly sequence.
5. Assembly Work	Prepare a plan of work for a buffet that requires the work of each student and includes the entree, salad, and dessert.
B. Time Conservation	Identify management problems that relate to providing nutritional family meals meals and establish ways to solve them.
3. Effect on Family Relations	-View filmstrips using specific types of equipment. -Discuss importance of using best tools and equipment for cleaning tasks. -Arrange a bulletin board with the caption, "Where Did My Time Go?"
C. Work Simplification	Analyze the equipment and supplies and decide if any can be eliminated, combined or rearranged for work simplification. -Tour the school kitchen and observe the arrangement and location of equipment and supplies.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Study references for arrangement of equipment and supplies in a kitchen. -Explain the meaning of "a place for everything and everything in its place."
2. Dovetailing Tasks	-Observe demonstrations for steps and motions to see if some can be eliminated, combined or two jobs done simultaneously. -Interview homemakers and find out what they expect in a well planned kitchen. -Pantomime work simplification techniques. Identify techniques and suggest situations for use in food preparation.
3. Job Analysis	Analyze plan for preparing a meal and completing the clean-up. -Perform motion study while another student follows plan.
4. Attitudes	-Discuss the attitude "That's the way I've always done it."
D. Organization of Kitchen	Compare layouts of various floor plans.
1. Layouts	-Visit new home under construction. -List advantages and disadvantages of the basic arrangements of kitchen plans selected from magazine and textbooks. -Draw diagram of one's own kitchen and evaluate according to individual or family needs.
VII. FOOD PREPARATION	PLAN, PREPARE AND SERVE FOODS FOR FAMILY MEALS.

A. Weights and Measures	Interpret directions using both the English and Metric measures. Make a plan of work listing equipment needed.
B. Recipe Use	-Study recipes in terms of action and descriptive words. Cite examples with action or descriptive words missing and have students fill in those words.
C. Equipment	-Plan a "Mystery Day." Each student is given a numbered card with recipe instructions in numbered order. End result is a food product such as muffins or cookies.
D. Basic Preparation	Acquire skill in basic food preparation.
1. Appetizers (Concepts are listed alphabetically, not in teaching sequence). a. Classification b. Usage and service	-Review general principles of etiquette and organization involved in entertaining. -Classify and give examples of the various types of appetizers. Select and prepare several. -Plan and entertain at an informal tea for parents and/or faculty.
3. Breads	Plan and prepare a "special holiday" yeast bread.
Yeast breads	-View filmstrip "Breads You Bake with Yeast" (General Mills). -Evaluate by use of a checklist at a tasting party.
4. Cakes	Compare methods of mixing and baking butter, sponge, and chiffon cakes.
Classification Principles of Preparation Frostings	-View filmstrip "Angel Food and Chiffon Cakes" (General Mills). -Find recipes using the three methods of preparation of cakes. -List characteristics for different types of cakes. -Plan, prepare and serve a sponge cake such as for jelly rolls.
	Name and list characteristics of basic types of frostings.
	-View filmstrip "Fun with Frostings" (General Mills). -Compare ready to use, mixes, and made at home frostings and determine basis for choosing each type.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
5. Candies Classification Crystalline Non-crystalline Variations Principles of preparation Temperature Handling Sugar cookery Care and storage	Develop skills in techniques of candy making. -Prepare variations of crystalline or non-crystalline candies. -Develop a score card to be used in judging these products. -Evaluate the finished products.
6. Casseroles Classification Uses Methods of Mixing	Demonstrate skills in preparing and serving nutritious and delicious casseroles. -Review ingredients that may be used in casseroles and explain the functions of each. -Plan a menu using a casserole for the entree. -Prepare casserole dishes utilizing leftovers.
7. Cheese	Exhibit various kinds of cheeses. -Prepare a chart listing federal grading of cheese. -Discuss proper storage of different types of cheese. -Have a cheese tasting party. Review principles of protein cookery. -List ways cheese can be used in menu planning. -Plan, prepare and serve a cheese souffle.

10. Desserts Classification Fruits Milk Gelatin Frozen Biscuits, cake, and pastry Eggs Principles of preparation	Apply principles of cookery in the preparation of a variety of desserts. -Define and select illustrations from magazines for a list of dessert terms. -Prepare desserts from the various classification and compare cost and nutritive value per serving. -Make a bulletin board illustrating fruit compotes and fruit whips. -Suggest several ways to serve fruits in desserts. -Discuss pastry desserts, cake desserts and crepes. -Prepare a bulletin board arrangement using gelatin desserts and frozen desserts. -Select a recipe for preparation of either a fruit whip or fruit compote. -Make a dessert sauce to serve with crepes. -Prepare either a gelatin or frozen dessert. -Complete an objective test on the principles of dessert preparation.
11. Eggs Functions Thickening Binding Coating Emulsifying Clarifying Leavening Garnishes Principles of Preparation Protein cookery Temperature Cooking time Care and storage	Apply principles of egg cookery with emphasis on the function of eggs as emulsifying, clarifying, leavening, and garnishing. -Plan to use eggs for emulsifying, such as mayonnaise made in blender. Compare homemade and ready-made mayonnaise in relation to flavor, appearance, and cost. -Find a recipe that uses eggs for clarifying, such as soups. -Prepare a cheese souffle with cheese sauce to show eggs as a leavening agent (Refer to Cheese). -Research ways to use eggs, such as garnishing salads, soups, and canapes. -Plan, prepare, and serve one or more of the above in a laboratory experience. -View filmstrip on eggs and egg cookery. -Evaluate by use of a teacher-pupil rating scale.
12. Fats and Oils Classification Principles of Preparation Temperature Care and Storage	Classify fats and oils according to form, source, and smoking point. -Review classifications of fats and oils according to form. -Research and report on principles of preparation using fats and oils including temperature for cooking, care, and storage. Plan, prepare, and serve a food using different forms of fats and oils.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	Evaluate finished product according to check list devised by class or groups. -Demonstrate clarification of used fat to remove odors (fish, onion) and store properly for reuse.
13. Fish Classification Methods of cooking Principles of preparation Pan frying Deep-fat frying Pan broiling Poaching Steaming Baking Oven frying	Demonstrate principles of fish cookery by a variety of preparation methods. -Serve fish attractively with suitable accompaniments. -Calculate cost per serving of each type fish prepared and compare nutritional value. -Evaluate meal with a teacher-student checklist.
16. Meats Classification Beef Pork Lamb Game Grading Forms Fresh Cured Canned Frozen	Apply principles of selection, care and preparation of meats. -Plan, prepare, serve, and evaluate one or more meat entrees. -Analyze recipes and/or prepare favorite dishes using game. -Compare different grades of meat according to price per pound of portion. -List principles of meat cookery and apply these in lab. -Analyze and/or prepare recipes using meat extenders. -Investigate use of extenders used commercially (Example - Soybeans). -Review principles of protein cookery. -Demonstrate carving techniques for various meats.

18. Pies and Pastries Classification One crust Two crust Tarts Turnovers Creampuffs and eclairs Principles of preparation	Develop skill in making a variety of pies and pastries. -Select a pie recipe and evaluate in terms of nutritive value and calories per serving. -Compare cost, preparation time, and flavor of a frozen prepared pie crust, a bakery pie, a homemade pie crust, and a pie crust made from a mix. -Prepare creampuffs and fill with a custard or pudding. Discuss characteristics and principles of cookery. -Discuss management skills in making quantities of tarts, creampuffs or pies.
19. Poultry Classification Methods of cooking Principles of preparation	Purchase, plan, prepare, and serve a dinner using poultry as the entree. -Review the contributions of poultry to the RDA. -Using a chart or transparency of inspection and grading stamps, discuss the following. How poultry is inspected. Factors used to determine poultry grades. Purpose and form of inspection and grading. -Visit a supermarket. Observe the inspection stamp and grade. Compare price of different styles of packaging. Compare costs of different types of poultry. -Plan, prepare, and serve one or more of the following. Chicken and Dumplings Chicken or Turkey with Dressing Chicken Salad -Evaluate the poultry lab.
20. Salads and Salad Dressings Classification Types Principles of preparation	Recall principles involved in preparation and use of salads and salad dressing. -Review principles of salad preparation (Filmstrip "Song of the Salad"). Identify types of salad greens and salad dressings. -Choose one of the ways in which salads may be served.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Plan, prepare, and serve the salad with appropriate dressing, accompaniments and garnish. -Plan, prepare, and serve a salad buffet. Calculate nutritional value and cost per serving.
23. Soup Classification Principles of preparation	Review terms, principles of cookery, soup forms, accompaniments and uses in menu planning. -Discuss and/or demonstrate techniques used in preparation of bisque. -Demonstrate special soups such as vichyssoise, gazpacho, and borsch and have a tasting party.
24. Spices Classification Principles of preparation	Explain the uses of spices and herbs. -Prepare a brief history of a spice or herb (individual class reports). -Display a variety of spices and observe form and odor. -Study charts to learn which spices usually complement certain foods. -Select recipes where spices are used to enhance the flavor of food to prepare in class. (Example: Hot Tea Punch with cinnamon). -Develop a word scramble using the names of spices.
25. Sweeteners Classification Forms Principles of Use	Research, report, and test artificial and natural sweeteners as to brands, forms, cost, government restrictions, availability, and reasons for use. -Study and prepare recipes using artificial sweeteners and compare product with natural sweeteners. -Arrange a display of artificial sweeteners. -Taste and compare samples of tea sweetened with various brands and forms of artificial and natural sugar. Samples will be labeled Brand X and Brand Y. Evaluate according to taste and draw conclusions concerning their use.

26 Vegetables	Prepare, taste, and evaluate vegetable dishes.
Principles of preparation	-Prepare one or two vegetable dishes for a "tasting lesson."
Methods of preparation	-Find in cookbook one or two other ways of serving these vegetables.
	-Investigate interesting methods of preparation of vegetables as marinated, uncooked for appetizers and dips and in combinations with meats and sauces for a "meal-in-one."
	-Compare vegetables as to cost, flavor, principles of preparation.

VIII. FOOD PRESERVATION	DEMONSTRATE METHODS OF FOOD PRESERVATION.
A. Home Preservation	Complete a written assignment on food sources and methods of preservation.
1. Food sources	-Prepare jelly. Evaluate and judge product on appearance, texture, and flavor.
2. Methods of preservation	
3. Methods of preparation	
B. Economic Aspects	-Compare cost of jelly made at home with cost of commercially prepared jelly.
3. Drying	

IX. FOOD RELATED OCCUPATIONS	DIFFERENTIATE THE TYPES OF FOOD SERVICE JOBS AND TRAINING THAT INFLUENCE EMPLOYMENT AND JOB ADVANCEMENT.
A. Types of Food Service Jobs	Research opportunities for self-employment in the food service field.
1. Entry Level Jobs	-Discuss factors in owning one's own business.
2. Technical or Skilled Jobs	-Relate managerial skills, sanitation principles and service skills to particular type jobs in the food industry.
3. Supervisory Jobs and Requirements	-Learn about franchise management and job opportunities by visiting a

LEVEL IV

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
4. Management Jobs and Requirements 5. Self-employment	fast food establishment. -Demonstrate basic cake decoration skills.
B. Training	Investigate types of training available in the field of foods and nutrition.
1. Vocational 2. Private 3. College 4. On-the-job 5. Advantages of Training Experience Obtaining a Job Promotion Flexible Job Selection	-Investigate job opportunities of a nutritionist. -Assign interviews with various agencies, businesses that employ people in the food service field, and report back to class. -Invite an employment counselor to explain availability of jobs in the area and in government food service. -Discuss the fringe benefits associated with each job type.
C. Factors Influencing Employment	Develop awareness that education and job training are continuous throughout life.
1. Characteristics for Employment 2. Family Lifestyles and Availability 3. Year-round Employment 4. Experience 5. Mobility 6. Self-employment 7. Fringe Benefit	-Read data on lifestyles and job changes during a lifetime.

D. Job Advancement 1. Length of Service 2. Promotion 3. On-the-job Training 4. Recommendations 5. Education 6. Interpersonal Relationships	Recognize factors that influence job advancement. -Interview managers of several types of businesses in the food area and determine personal qualities that are most significant.
E. Job Related Organizations	Report on organizations, such as ADA, unions, and other related organizations.

RESOURCE UNIT FOR CONSUMER AND HOMEMAKING

LEVEL V

LEVEL V
Foods and Nutrition

Level V is designed for the 12th grade or Home Economics IV, and includes suggestions for the upper level student who has shown proficiency in handling basic subject matter. In some instances the teacher is referred to Level IV where the concepts are developed with a broader scope and in-depth study. The teacher should use level pre-testing for accountability in selecting learning experiences that are most appropriate for the student's need and abilities.

The experiences at Level V are built on a strong knowledge base and every effort should be made to select those that are most challenging and specialized.

Overall Objectives:

After the completion of this unit, the Foods and Nutrition student will be able to:

Plan, prepare, serve and evaluate foods for special occasions involving complex techniques and varieties of table service.

Apply the basic principles of food preservation.

Explain types of food service jobs, and training that influence employment and job advancement.

Behavioral Objectives:

I. Review and apply principles of basic nutrition to planning, preparation, and service of foods.

II. Compare consumer practices of purchasing food and equipment based on income.

III. Evaluate food habits and relate customs to meal planning and service.

IV. Evaluate large kitchen equipment, technological advances, regulations, and minimum needs.

V. Outline the standards and laws of sanitation and safety and their effect on food spoilage, insect, and rodent control.

VI. Apply management and work simplification techniques.

VII. Plan, prepare, serve and evaluate ethnic and foreign foods and meals for special occasions.

VIII. Demonstrate the basic principles of food preservation.

IX. Determine ways that education and training influence employability and job advancement in various levels of food service jobs.

LEVEL V

UNIT OUTLINE

- I. Nutrition
  - C. Special Dietary Needs
- II. Consumer Practices
  - C. Food Budgets
    - 3. Price Comparison
    - 4. Income
    - 5. Meal Planning
  - D. Purchasing Food and Equipment
    - 1. Factors Affecting Cost
    - 2. Grading
    - 5. Equipment
- III. Meal Planning and Service (Home and Institutional)
  - A. Planning Meals
    - 1. Nutrition
    - 2. Family Needs
    - 3. Budget
    - 4. Time
    - 5. Variety
    - 6. Activities
    - 7. Likes and Dislikes
    - 8. Number of People
    - 9. Age
    - 10. Health
    - 11. Occupation
    - 12. Climate
  - C. Meal Patterns
    - 5. Dinner
    - 6. Special Occasions
  - D. Eating Styles
    - 1. Meal Types
    - 6. Ethnic and Foreign Foods
  - E. Special Dietary Needs
    - 4. Senior Citizens
    - 5. Therapeutic
    - 7. Pregnancy and Lactation
  - F. Table Setting
    - 3. Appointments
    - 4. Decorations
  - G. Table Service
    - 1. Types
    - 2. Techniques

H. Table Etiquette
1. Value
2. Principles and Guidelines
IV. Kitchen Equipment
A. Large - Home and Institutional
1. Selecting and Purchasing
2. Use and Installation
3. Care and Maintenance
4. Kitchen Placements
E. Technological Advances
F. Regulations
G. Minimum Needs
V. Sanitation and Safety (Home and Institutional)
A. Sanitation
1. Standards and Laws
2. Insect and Rodent Control
3. Food Spoilage
4. Clean-up
B. Safety
1. Standards
2. Laws
VI. Management (Home and Institutional)
A. Energy (Human) Conservation
4. Work Sequence
5. Assembly Work
B. Time Conservation
3. Effect on Family Relations

C. Work Simplification
2. Dovetailing Tasks
D. Organization of Kitchen
1. Layouts
2. Centers and Work Area
3. Arrangement of Equipment
4. Storage Areas
5. Group Cooperation
VII. Food Preparation
B. Recipe Use
C. Equipment
D. Basic Preparation
3. Breads
4. Cakes
6. Casseroles
7. Cheese
10. Desserts
11. Eggs
12. Fats and Oils
13. Fish
16. Meats
18. Pies and Pastries
19. Poultry
20. Salads and Salad Dressings
23. Soups
24. Spices
25. Sweeteners
26. Vegetables

VIII. Food Preservation
    A. Home Preservation
        1. Food Sources
        2. Methods of Preservation - Acid and Non-Acid
        3. Methods of Preparation
IX. Food Related Occupations

LEVEL V (Grade 12-Adult)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. NUTRITION	ANALYZE SELECTED MENUS AND DIETS FOR SPECIFIC OCCASIONS AND SPECIFIED HUMAN NEEDS.
C. Special Dietary Needs	Refer to Level IV, Concept I. Nutrition; and Level V, Concept III. Meal Planning and Service, E. Special Dietary Needs.
II. CONSUMER PRACTICES	COMPARE CONSUMER PRACTICES OF PURCHASING FOOD AND EQUIPMENT BASED ON INCOME.
C. Food Budgets	Refer to Level IV, Concept II. Consumer Practices, C. Food Budgets.
3. Price Comparison 4. Income 5. Meal Planning	
D. Purchasing Food and Equipment	Evaluate purchasing practices.
1. Factors Affecting Costs	-Invite grocery store manager to class to explain pricing and tell about job requirements and opportunities.
2. Grading	-Identify non-food items which may be included in the grocery basket that make food costs appear larger.
5. Equipment	Analyze wattage used by preparing food dishes in a particular appliance and compare with traditional range type cooking. -Plan and prepare items for a meal using small appliances. -Make recommendations for basic equipment purchases that are energy efficient.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
III. MEAL PLANNING AND SERVICE	EVALUATE FOOD HABITS AND RELATE CUSTOMS TO MEAL PLANNING AND SERVICE.
A. Planning Meals	Apply basic principles of menu planning and service in a variety of situations.
1. Nutrition 2. Family Needs 3. Budget 4. Time 5. Variety 6. Activities 7. Likes and Dislikes 8. Number of People 9. Age 10. Health 11. Occupation 12. Climate	-Select pictures of many types of foods prepared in a variety of ways and mount on construction paper. -Select pictures to set up mock menu and table service to meet the needs of several groups: the senior citizen, teenagers, a ladies' luncheon and others. -Evaluate according to desirability of menu selection and appropriate service.
C. Meal Patterns 5. Dinner 6. Special Occasions	-Arrange selections of food for a guest's breakfast, brunch on a special holiday, tea or reception, dinner.
D. Eating Styles	List and prepare some foods that are a part of our average diet that are traditionally foreign.
1. Meal Types	-Utilize the library to research foreign foods that have become a part of the American culture.
6. Ethnic and Foreign Foods	-Invite a person of another culture to share characteristics of their country in areas of food, dress, and habits as an FHA activity. -Dramatize festive occasions in other countries - Christmas around the world - as a class or FHA activity.

	-Prepare and serve selection of foods from different national origins. Smorgasbord or buffet. -Visit a restaurant that specializes in a foreign food. -Discuss terminology on menus from foreign food restaurants.
E. Special Dietary Needs	Implement special diets for a given situation.
4. Senior Citizens 5. Therapeutic 7. Pregnancy and Lactation	-Prepare liquid, soft and regular diets for a person who is ill. -Look through current ads from the grocery store. Plan nutritious menus for two days for a single person who has approximately (?$) a day to spend on food. -List the stages of the life cycle. For each stage explain possible dietary problems and how they will affect food habits. -Prepare a report from references which explains how dietary habits of pregnant teenagers influence the health of the baby. -Plan a week's menus for an elderly relative who is on a low salt diet and limited income and who lives alone. Make a grocery list and estimate the cost for each day.
F. Table Setting	Display creativity in table setting.
3. Appointment 4. Decorations	-Collect pictures of a variety of appointments and classify them according to principles of art - color, texture, contrast, material type. -Group appropriate choices for a particular occasion. -Locate items in the department that might be used in a creative manner. (Example: Teacup for flowers).
G. Table Service H. Table Etiquette	Refer to Level IV, Concept III. Meal Planning and Service, G. Table Service.

IV. KITCHEN EQUIPMENT	LIST FACTORS AFFECTING EQUIPMENT NEEDS FOR FAMILIES.
A. Large	Refer to Level IV, Concept IV. Kitchen Equipment.

LEVEL V

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
E. Technological Advances	Explain the terms: solid state, electric ignition, self-defrosting.
F. Regulations	Describe factors affecting a family's needs by interviewing neighborhood homemakers on the topic "Equipment My Family Finds Necessary, Unnecessary, and Nice." Share views with classmates.
G. Minimum Needs	
V. SANITATION AND SAFETY	OUTLINE THE STANDARDS AND LAWS OF SANITATION AND SAFETY AND THEIR EFFECT ON FOOD SPOILAGE, INSECT, AND RODENT CONTROL.
A. Sanitation	Refer to Level IV, Concept V. Sanitation and Safety.
1. Standards and Laws	List governmental agencies that regulate sanitation and standards of health.
2. Insect and Rodent Control	-Read articles in library on regulatory agencies.
3. Food Spoilage	-Invite guest speaker from Health Department to discuss sanitation standards for public and private food service.
4. Clean-Up	-Visit the school cafeteria and report on sanitation procedures for routine clean-up, proper storage of food, and insect and rodent control.
B. Safety	Cite safety rules that are necessary in the food preparation area at home and in an institution.
1. Standards	-Research statistics from the U. S. Public Safety Department and find the chief cause of accidents.

2. Laws	-Write a slogan for electrical safety and illustrate with a poster.

VI. MANAGEMENT (HOME AND INSTITUTIONAL)	APPLY MANAGEMENT AND WORK SIMPLIFICATION TECHNIQUES.
A. Energy (Human) Conservation	Demonstrate wise use of time and energy in planning, preparing and serving various dishes.
4. Work Sequence	-Discuss motion study techniques and conduct a motion study during a laboratory preparation.
5. Assembly Work	-Analyze motion study and make suggestions for improvement. -Plan a quantity food preparation for a class activity - sandwiches to sell at a ball game for an FHA money making project - and devise an assembly line for producing the sandwiches.
B. Time Conservation	Conduct a time and motion study.
3. Effect of Family Relations	-Discuss the concepts of cooking double; cooking and freezing; serving foods in their simplest form. -Demonstrate proper methods of thawing, heating or cooking with microwave.
C. Work Simplification	
2. Dovetailing Tasks	Demonstrate the concept of dovetailing in meal preparation.
	-Plan a week's menu and shopping lists and make a plan for dovetailing meal preparation with other household tasks.
D. Organization of Kitchen	Recognize characteristics of a well-planned kitchen.
1. Layouts	-Study the Beltsville Kitchen Model and list features suggested.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
2. Centers and Work Areas 3. Arrangement of Equipment 4. Storage Areas 5. Group Cooperation	-Make a list of principles for storage of small kitchen equipment for use in arranging foods laboratory. -Discuss how group cooperation in meal preparation is different from individual planning.
VII. FOOD PREPARATION	PLAN, PREPARE, SERVE AND EVALUATE ETHNIC AND FOREIGN FOODS AND MEALS FOR SPECIAL OCCASIONS.
B. Recipe Use	Recognize the use of the metric system of measuring food items in recipes. -Learn the meaning of gram, kilogram, liter, millilitre, etc. -Prepare a cake using metric measures. -Using a conversion chart, change a traditional recipe to metric.
C. Equipment	Refer to Level IV, Concept VII. Food Preparation, B. Equipment.
D. Basic Preparation	Refer to Level IV, Concept VII. Food Preparation, D. Basic Preparations. 3. Breads.
3. Breads	-Study recipes of variations of breads - Mexican cornbread for example - and prepare several with origins from other countries.
4. Cakes	Apply principles of cake making in preparation of specialty cakes. -Visit a bakery and see demonstrations of cake decorations of speciality cakes. -Make and decorate clever "Cutup" cakes for a child's birthday party.

	-Make cupcakes and use speed techniques for frosting and decorating to take to the nursing home or children's ward at the hospital as an FHA Activity.
6. Casseroles	Refer to Level IV, Concept VII. Food Preparation, 6. Casseroles.
7. Cheese	Recognize the versatility of cheeses not only as nutritious snacks, but as ingredients in many dishes. -Plan and prepare a luncheon menu with cheese souffle as the main dish.
10. Desserts	Refer to Level IV, Concept VII. Food Preparation, 10. Desserts.
11. Eggs	Refer to Level II, Concept VII. Food Preparation, 11. Eggs.
12. Fats and Oils	Refer to Level IV, Concept VII. Food Preparation, 12. Fats and Oils.
13. Fish	List a wide variety of fish and seafoods that are available, and be able to prepare and serve in a variety of ways. -Compare the cost and flavor of various forms of fish such as canned, frozen, or fresh. -Review nutritive value of fish. -Plan a meal using fish as the main dish and serve correctly. Examples: Shrimp Creole, Gumbo, Broiled Flounder, Crab Meat Au Gratin.
16. Meats	Refer to Level IV, Concept VII. Food Preparation, 16. Meats. -Plan and prepare a main dish using a specialty cut. -Demonstrate a method of cooking an economy cut for a festive occasion Example: rolled flank steak.
18. Pies and Pastries	Prepare a variety of pastries emphasizing a holiday season.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
19. Poultry	Prepare chicken a-la-king as a demonstration using patty shells made from experiences above. Show versatility of this used as an appetizer or main dish.
20. Salads and Salad Dressings	Refer to Level IV, Concept VII. Food Preparation, 20. Salads and Salad Dressings.
23. Soups	Refer to Level IV, Concept VII. Food Preparation, 23. Soups. -Prepare broth from soup bones. Serve as a course in a formal meal.
24. Spices	Refer to Level IV, Concept VII. Food Preparation, 24. Spices.
25. Sweeteners	Study the impact of artificial sweeteners on the market and report to class.
26. Vegetables	Identify vegetables that are generally available. -Visit a grocery and identify all fresh vegetables. Have produce manager explain how to select these. -Select recipes that are appropriate for company meals. -Select unusual vegetables and do a comparison of types, cooking techniques, taste and use in recipes.
VIII. FOOD PRESERVATION	DEMONSTRATE THE BASIC PRINCIPLES OF FOOD PRESERVATION.
A. Home Preservation	Refer to Level IV, Concept VIII. Home Preservation, A. Food Sources.

1. Food Sources	-Make orange marmalade, wrap and decorate for gifts.
2. Methods of Preservation	-Demonstrate use of food processors in preparing foods for preservation. (For example: cucumbers for pickling)
3. Methods of Preparation	List principles involved in cannning fruit, vegetable pickles, and relishes. -List several recipes for pickles and relishes that could be prepared in a laboratory experience. Choose one of these or from suggested listing below to plan, prepare, and serve in a meal situation. Dill Pickles Beet Pickles Onion Pickles Pickled Peppers Chow-Chow Relish Cucumber Relish

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IX. FOOD RELATED OCCUPATIONS	Refer to Level IV, Concept IX. Food Related Occupations.

SEMESTER COURSES

SEMESTER COURSE
BEGINNING FOODS AND NUTRITION

This course is designed for students, both male and female, who may have had limited formal instruction in Foods and Nutrition, who are enrolled in tenth to twelfth grades, and who have varying career goals.

After determining a student's level of learning through pre-testing, the teacher may select objectives and learning experiences from appropriate units of the guide. These units are outlined in Level I through Level III of this guide. Each teacher is urged to select teaching strategies and specific learning experiences that are appropriate to students with special needs, such as the handicapped, disadvantaged, gifted, and potential dropouts. A list of references and resources accompanies this guide but is in no way exhaustive. The teacher should feel free to draw from other sources.

Suggested concepts for this course are based on the assumption that foods laboratory facilities will be available. If facilities, finances, and/or teaching assignments cannot accommodate this semester course with laboratory experiences, it is suggested that priority be given to Levels IV and V and/or other semester courses for inclusion in the curriculum.

Overall Objectives:

Upon completion of this unit, the student will be able to:

Plan, prepare and serve simple meals.

Identify job opportunities in food related occupations at the entry level.

Behavioral Objectives:

I. Recall the USDA Daily Food Guide and list foods within each group.

II. Discuss food facts and functions, caloric requirements, current issues and special dietary needs.

III. Demonstrate simple table settings and services.

IV. Identify kitchen utensils and tools and describe their use and storage.

V. Apply sanitation and safety practices in food preparation and storage.

VI. Illustrate the efficient use of energy and time with emphasis on kitchen organization and work simplification.

VII. Plan, prepare, serve, and evaluate simple foods and meals to meet individual needs.

VIII. Apply the principles of correct food preparation.

IX. List and describe job opportunities in food related occupations at the entry level.

X. Discuss the effect of advertising, governmental agencies, assistance programs, and laws on the cost of food and equipment.

BEGINNING FOODS AND NUTRITION OUTLINE

- I. Nutrition
  - A. Food Facts and Functions
    - 1. USDA Daily Food Guide
    - 2. Caloric Requirements
    - 4. Nutrients, Functions and Sources
  - B. Current Issues and Concerns
    - 1. Habits
    - 2. Food Fads and Myths
    - 4. Nutrition - Health Problems
    - 5. Food of the Future
  - C. Special Dietary Needs
    - 2. Pregnancy and Lactation
    - 3. Weight Control
    - 5. Children
    - 6. Infants
    - 7. Adolescents
- II. Consumer Practices
  - A. Government Agencies, Laws and Assistance Programs
    - 1. Consumer Protection Laws
    - 2. Agencies
    - 3. Assistance Programs
  - B. Advertising
    - 1. Types
    - 2. Benefits
    - 3. Effects
    - 4. Persuasive Techniques
  - C. Food Budgets
    - 1. Food Purchases
    - 2. Market Orders
    - 3. Price Comparison
    - 4. Income

    5. Meal Planning
    6. Comparative Shopping
  D. Purchasing Food and Equipment
    1. Factors Affecting Cost
    2. Grading
    3. Packaging
    4. Stores
    5. Equipment
  E. Eating Out
    1. Advantages and Disadvantages
    2. Types of Establishments
    3. Financial Consideration
    4. Physical and Psychological Aspects
    5. Lifestyle
    6. Gratuities
III. Meal Planning and Service (Home and Institutional)
  A. Planning Meals
    1. Nutrition
    2. Family Needs
    3. Budget
    4. Time
    5. Variety
    6. Activities
    7. Likes and Dislikes
    8. Number of People
    9. Age
    10. Health
    11. Occupation
    12. Climate
  B. Menu Writing
    1. Form
    2. Terms
  C. Meal Patterns
    1. Breakfast
    2. Lunch

    3. Supper
    4. Snacks
    7. Packed Lunches
  D. Eating Styles
    1. Meal Types
    2. Automation
    3. Mobility
    4. Lifestyles
    5. Eating Out
  E. Special Dietary Needs
    1. Infants
    2. Children
    3. Adolescents
    4. Senior Citizens
    5. Therapeutic
    6. Weight Control
    7. Pregnancy and Lactation
  F. Table Setting
    1. Guidelines
    2. Covers
  G. Table Service
    1. Types
    2. Techniques
  H. Table Etiquette
    1. Value
    2. Principles and Guidelines
IV. Kitchen Equipment
  A. Large - Home and Institutional
    2. Use
    3. Care
    4. Kitchen Placement
  B. Small - Home and Institutional
    1. Portable Appliances
    2. Kitchen Utensils and Gadgets
    3. Selecting and Purchasing
    4. Use

        5. Care and Maintenance
        6. Storage
        7. Kitchen Placement
    C. Energy
        1. Forms
        2. Conservation
    D. Safety Procedures
        1. Operation
        2. Maintenance
        3. Installation
    E. Technological Advances
V. Sanitation and Safety (Home and Institutional)
    A. Sanitation
        1. Standards and Laws
        2. Insect and Rodent Control
        3. Food Spoilage
        4. Clean-up
    B. Safety
        1. Standards
        2. Laws
VI. Management (Home and Institutional)
    A. Energy (Human) Conservation
        1. Mental Attitude
        2. Physical Influences
        3. Analysis of Tasks
        4. Work Sequence
        5. Assembly Work
    B. Time Conservation
        1. Use
        2. Schedules
        3. Effect on Family Relations
    C. Work Simplification
        1. Time and Labor Saving Devices
        2. Dovetailing Tasks
        3. Job Analysis
        4. Attitudes
    D. Organization of Kitchen
        1. Layouts
        2. Centers and Work Areas
        3. Arrangement of Equipment
        4. Storage Areas
        5. Group Cooperation
VII. Food Preparation
    A. Weights and Measures (Metrics and English)
    B. Recipe Use
    C. Equipment
    D. Basic Preparation
        2. Beverages
        3. Breads (Quick)
        4. Cakes
        6. Casseroles
        7. Cheese
        8. Convenience Foods
        9. Cookies
        10. Desserts
        11. Eggs
        14. Fruits
        15. Grains and Grain Products
        16. Meats
        17. Milk
        18. Pies and Pastries
        19. Poultry

    20. Salads and Salad Dressings
    21. Sandwiches
    22. Sauces and Gravies
    23. Soups
    25. Sweeteners
    26. Vegetables

VIII. Food Preservation (Abbreviate or omit)
  A. Home Preservation
    1. Food Sources
    2. Methods of Preservation - Acid and Non-acid Foods
    3. Methods of Preparation
    4. Use of Preserved Foods
    5. Comparison of Nutritive Value
    6. Product Standards
    7. Packaging Materials and Labels
    8. Storage
  B. Economic Aspects
    1. Freezing
    2. Canning
    3. Drying

IX. Food Related Occupations
  A. Types of Food Service Jobs
    1. Entry Level Jobs
    2. Technical and Skilled Jobs
    3. Supervisory Jobs and Requirements
    4. Management Jobs and Requirements
    5. Self-employment
  C. Factors Influencing Employment
    1. Characteristics for Employment
    2. Family Lifestyles and Availability
    3. Year-round Employment
    4. Experience
    5. Mobility
    6. Self-employment
    7. Fringe Benefits
  E. Job Related Organizations

SEMESTER COURSE
ADVANCED FOODS AND NUTRITION
(Prerequisite Required)

Concepts should be developed at this advanced level of a concentrated semester course so that students' knowledge and skills are equivalent to the student who has completed Levels I-V. Students enrolling in the Advanced Foods and Nutrition semester course must have had Home Economics I and II, or the Beginning Foods and Nutrition semester course. To use the suggested conceptual outline, refer to the Levels I-V to select appropriate learning experiences. This is only a guide and the teacher should feel free to add innovative ideas and additional learning experiences whenever desired.

Overall Objectives:

After the completion of this unit, the advanced foods and nutrition student will be able to:

Plan, prepare, serve and evaluate foods for family meals and special occasions involving complex food techniques and various forms of table service.

Illustrate and apply the basic principles of food preservation.

Explain types and advancement possibilities of food related occupations.

Perform introductory wage earning skills.

Behavioral Objectives:

I. Formulate various plans for dietary needs of individuals, including those with specific problems.

II. Discuss current issues and concerns affecting nutrition and equipment.

III. Develop guidelines for comparative shopping with emphasis on factors affecting the cost of food and equipment.

IV. Evaluate food habits and relate customs to meal planning and service.

V. Plan, prepare, serve, and evaluate family and special occasion meals.

VI. Research and evaluate advancements and regulations relating to kitchen tools and equipment.

VII. Outline the standards and laws of sanitation and safety and their effects on food spoilage, insect, and rodent control.

VIII. Apply management and work simplification techniques.

XI. Demonstrate the basic principles of food preservation.

X. Describe food related occupations and training that is needed for employment and advancement.

ADVANCED FOODS AND NUTRITION OUTLINE

I. Nutrition
  A. Food Facts and Functions
    2. Caloric Requirements
    3. Recommended Daily Allowances
    4. Nutrients, Functions and Sources
  B. Current Issues and Concerns
    1. Habits
    2. Food Fads and Myths
    3. Additives and Preservatives
    4. Nutrition - Health Problems
    5. Food of the Future
  C. Special Dietary Needs
    1. Therapeutic
    2. Pregnancy and Lactation
    3. Weight Control
    4. Senior Citizens
    5. Children
    6. Infants
    7. Adolescents

II. Consumer Practices
  A. Government Agencies, Laws and Assistance Programs
    3. Assistance Programs
  C. Food Budgets
    1. Food Purchases
    2. Market Orders
    3. Price Comparison
    4. Income
    5. Meal Planning
    6. Comparative Shopping
  D. Purchasing Food and Equipment
    1. Factors Affecting Cost
    2 Grading
    3. Packaging
    4. Stores
    5. Equipment
  E. Eating Out
    1. Advantages and Disadvantages
    2. Types of Establishments

3. Financial Consideration
4. Physical and Psychological Aspects
5. Lifestyle
6. Gratuities

III. Meal Planning and Service (Home and Institutional)
A. Planning Meals
1. Nutrition
2. Family Needs
3. Budget
4. Time
5. Variety
6. Activities
7. Likes and Dislikes
8. Number of People
9. Age
10. Health
11. Occupation
12. Climate

B. Menu Writing
1. Form
2. Terms

C. Meal Patterns
2. Lunch
3. Supper
4. Snacks
5. Dinner
6. Special Occasions
7. Packed Lunches

D. Eating Styles
1. Meal Types
2. Automation
3. Mobility
4. Lifestyles
5. Eating Out
6. Ethnic and Foreign Foods

E. Special Dietary Needs
1. Infants
2. Children
3. Adolescents
4. Senior Citizens
5. Therapeutic
6. Weight Control
7. Pregnancy and Lactation

F. Table Setting
1. Guidelines
2. Covers
3. Appointments
4. Decorations

G. Table Service
1. Types
2. Techniques

H. Table Etiquette
1. Value
2. Principles and Guidelines

IV. Kitchen Equipment
A. Large - Home and Institutional
1. Selecting and Purchasing
2. Use and Installation
3. Care and Maintenance
4. Kitchen Placement

B. Small - Home and Institutional
1. Portable Appliances
3. Selecting and Purchasing
4. Use
5. Care and Maintenance
6. Storage
7. Kitchen Placement

C. Energy
1. Forms
2. Conservation

  D. Safety Procedures
    1. Operation
    2. Maintenance
    3. Installation
  E. Technological Advances
  F. Regulations
    1. Private
    2. Government
  G. Minimum Needs
    1. Large
    2. Small
V. Sanitation and Safety (Home and Institutional)
  A. Sanitation
    1. Standards and Laws
    2. Insect and Rodent Control
    3. Food Spoilage
  B. Safety
    1. Standards
    2. Laws
VI. Management (Home and Institutional)
  A. Energy (Human) Conservation
    1. Mental Attitude
    2. Physical Influences
    3. Analysis of Tasks
    4. Work Sequence
    5. Assembly Work
  B. Time Conservation
    1. Use
    2. Schedules
    3. Effect on Family Relations
  C. Work Simplification
    1. Time and Labor Saving Devices
    2. Dovetailing Tasks
    3. Job Analysis
    4. Attitudes
  D. Organization of Kitchen
    1. Layouts
    2. Centers and Work Areas
    3. Arrangement of Equipment
    4. Storage Areas
    5. Group Cooperation
VII. Food Preparation (Metric and English)
  A. Weights and Measures
  B. Recipe Use
  C. Equipment
  D. Basic Preparation
    1. Appetizers
    3. Breads (Yeast)
    4. Cakes
    5. Candies
    6. Casseroles
    10. Desserts
    11. Eggs
    12. Fats and Oils
    13. Fish
    14. Fruits
    15. Grains and Grain Products
    16. Meats
    17. Milk
    18. Pies and Pastries
    19. Poultry
    20. Salads and Salad Dressings
    21. Sandwiches
    22. Sauces and Gravies
    23. Soups
    24. Spices
    26. Vegetables
VIII. Food Preservation
  A. Home Preservation
    1. Food Sources
    2. Methods of Preservation - Acid and Non-acid Foods

    3. Methods of Preparation
    4. Use of Preserved Foods
    5. Comparison of Nutritive Value
    6. Product Standards
    7. Packaging Materials and Labels
    8. Storage
  B. Economic Aspects
    1. Freezing
    2. Canning
    3. Drying

IX. Food Related Occupations
  A. Types of Food Service Jobs
    1. Entry Level Jobs
    2. Technical and Skilled Jobs
    3. Supervisory Jobs and Requirements
    4. Management Jobs and Requirements
    5. Self-employment
  B. Training
    1. Vocational
    2. Private
    3. College
    4. On-the-job
    5. Advantages of Training
  C. Factors Influencing Employment
    1. Characteristics for Employment
    2. Family Lifestyles and Availability
    3. Year-round employment
    4. Experience
    5. Mobility
    6. Self-employment
    7. Fringe Benefits
  D. Job Advancement
    1. Length of Service
    2. Promotion
    3. On-the-job Training
    4. Recommendations
    5. Education
    6. Interpersonal Relationships
  E. Job Related Organizations

FOODS AND NUTRITION WITHIN SEMESTER COURSES

Many of the semester courses offered in home economics incorporate foods related curriculum. The following outlines are provided to serve as a guide for concepts which may be included as a part of a subject matter semester course. The teacher would need to select activities suited to the needs of the class enrollment. For certain concepts, laboratory facilities would be useful, but if facilities are not available, there are activities that can be adapted to any classroom situation.

Suggestions for length of time have been given where feasible. A list of references and resources accompanies each unit, but is in no way exhaustive. The teacher should feel free to draw from other sources.

CHILD DEVELOPMENT
AND
ADVANCED CHILD DEVELOPMENT OUTLINE

I. Nutrition
    A. Food Facts and Functions
        1. Basic Four Food Groups
        3. Recommended Daily Allowances and Minimum Daily Requirements
        4. Nutrients, Functions, and Sources
    B. Current Issues and Concerns
        1. Habits
        3. Additives and Preservatives
    C. Special Dietary Needs
        1. Therapeutic
        2. Pregnancy and Lactation
        3. Weight Control
        5. Children
        6. Infants
        7. Adolescents

II. Consumer Practices
    A. Government Agencies, Laws and Assistance Programs
        3. Assistance Programs

III. Meal Planning and Service (Home and Institutional)
    A. Planning Meals
        1. Nutrition
        2. Family Needs
        3. Budget
        4. Time
        5. Variety
        6. Activities
        7. Likes and Dislikes
        8. Number of People

9. Age
10. Health
11. Occupation
12. Climate
C. Meal Patterns
  2. Lunch
  4. Snacks
  7. Packed Lunches
D. Eating Styles
  4. Lifestyles
  5. Eating Out
E. Special Dietary Needs
  1. Infants
  2. Children
  5. Therapeutic
  6. Weight Control
  7. Pregnancy and Lactation
H. Table Etiquette
  1. Values
  2. Principles and Guidelines
V. Sanitation and Safety (Home and Institutional)
  A. Sanitation (as applicable)
  B. Safety (as applicable)
VII. Food Preparation
  A. Weights and Measures
  B. Recipe Use
  C. Equipment
  D. Basic Preparation
    2. Beverages
    7. Cheese
    9. Cookies
    10. Dessert
    11. Eggs
    14. Fruits
    17. Milk

21. Sandwiches
23. Soups
26. Vegetables
IX. Food Related Occupations
  A. Types of Food Service Jobs
    1. Entry Level Jobs of Child Care Facilities

CONSUMER EDUCATION
AND
FAMILY ECONOMICS OUTLINE

- I. Nutrition
  - B. Current Issues and Concerns
    - 3. Additives and Preservatives
    - 4. Nutrition - Health Problems
    - 5. Food of the Future
- II. Consumer Practices
  - A. Government Agencies, Laws and Assistance Programs
    - 1. Consumer Protection Laws
    - 2. Agencies
    - 3. Assistance Programs
  - B. Advertising
    - 1. Types
    - 2. Benefits
    - 3. Effects
    - 4. Persuasive Techniques
  - C. Food Budgets
    - 1. Food Purchases
    - 2. Market Orders
    - 3. Price Comparison
    - 4. Income
    - 5. Meal Planning
    - 6. Comparative Shopping
  - D. Purchasing Food and Equipment
    - 1. Factors Affecting Cost
    - 2. Grading
    - 3. Packaging
    - 4. Stores
    - 5. Equipment
  - E. Eating Out
    - 1. Advantages and Disadvantages
    - 2. Types of Establishments
    - 3. Financial Consideration
    - 4. Physical and Psychological Aspects
    - 5. Lifestyle
    - 6. Gratuities
- IV. Kitchen Equipment
  - A. Large - Home and Institutional
    - 1. Selecting and Purchasing
    - 2. Use and Installation
    - 3. Care and Maintenance
    - 4. Kitchen Placement
  - B. Small - Home and Institutional
    - 1. Portable Appliances
    - 2. Kitchen Utensils and Gadgets
    - 3. Selecting and Purchasing
    - 4. Use
    - 5. Care and Maintenance
    - 6. Storage
    - 7. Kitchen Placement
  - C. Energy
    - 1. Forms
    - 2. Conservation
  - D. Safety Procedures
    - 1. Operation
    - 2. Maintenance
    - 3. Installation
  - E. Technological Advances
  - F. Regulations
    - 1. Private
    - 2. Government
  - G. Minimum Needs
    - 1. Large
    - 2. Small

GOURMET COOKERY OUTLINE

III. Meal Planning and Service
  A. Planning Meals
    3. Budget
    4. Time
    5. Variety
  B. Menu Writing
    1. Form
    2. Terms
  C. Meal Patterns
    1. Breakfast
    2. Lunch
    5. Dinner
    6. Special Occasions
  D. Eating Styles
    1. Meal Types
    4. Life Styles
    6. Ethnic and Foreign Foods
  F. Table Setting
    1. Guidelines
    2. Covers
    3. Appointments
    4. Decorations
  G. Table Service
    1. Types
    2. Techniques
  H. Table Etiquette
    1. Value
    2. Principles and Guidelines
V. Sanitation and Safety (Home and Institutional)
  A. Sanitation
    1. Standards and Laws
  B. Safety
    1. Standards
    2. Laws
VI. Management (Home and Institutional)
  A. Energy (Human) Conservation
    1. Mental Attitude
    2. Physical Influences
    3. Analysis of Tasks
    4. Work Sequence
    5. Assembly Work
  B. Time Conservation
    1. Use
    2. Schedules
    3. Effect on Family Relations
  C. Work Simplification
    1. Time and Laborsaving Devices
    2. Dovetailing Tasks
    3. Job Analysis
    4. Attitudes
VII. Food Preparation
  A. Weights and Measures
  B. Recipe Use
  C. Equipment
  D. Basic Preparation
    1. Appetizers
    2. Beverages
    3. Breads
    4. Cakes
    5. Candies
    6. Casseroles
    7. Cheese
    8. Convenience Foods
    9. Cookies
    10. Desserts
    11. Eggs
    12. Fats and Oils

        13. Fish
        14. Fruits
        15. Grains and Grain Products
        16. Meats
        17. Milk
        18. Pies and Pastries
        19. Poultry
        20. Salads and Salad Dressings
        21. Sandwiches
        22. Sauces and Gravies
        23. Soups
        24. Spices
        25. Sweeteners
        26. Vegetables

IX. Food Related Occupations
    A. Types of Food Service Jobs
        1. Entry Level Jobs
        2. Technical and Skilled Jobs
        3. Supervisory Jobs and Requirements
        4. Management Jobs and Requirements
        5. Self-employment
    B. Training
        1. Vocational
        2. Private
        3. College
        4. On-the-job
        5. Advantages of Training
    C. Factors Influencing Employment
        1. Characteristics for Employment
        2. Family Lifestyles and Availability
        3. Year-round Employment
        4. Experiences
        5. Mobility
        6. Self-employment
        7. Fringe Benefits
    D. Job Advancement
        1. Length of Service
        2. Promotion
        3. On-the-job Training
        4. Recommendations
        5. Education
        6. Interpersonal Relationships
    E. Job Related Organizations

HOUSING AND EQUIPMENT OUTLINE

- II. Consumer Practices
  - A. Government Agencies, Laws and Assistance Programs
    - 1. Consumer Protection Laws
    - 2. Agencies
    - 3. Assistance Programs
  - B. Advertising
    - 1. Types
    - 2. Benefits
    - 3. Effects
    - 4. Persuasive Techniques
  - D. Purchasing Food and Equipment
    - 1. Factors Affecting Cost
    - 5. Equipment
- IV. Kitchen Equipment
  - A. Large - Home and Institutional
    - 1. Selecting and Purchasing
    - 2. Use and Installation
    - 3. Care and Maintenance
    - 4. Kitchen Placement
  - B. Small - Home and Institutional
    - 1. Portable Appliances
    - 2. Kitchen Utensils and Gadgets
    - 3. Selecting and Purchasing
    - 4. Use
    - 5. Care and Maintenance
    - 6. Storage
    - 7. Kitchen Placement
  - C. Energy
    - 1. Forms
    - 2. Conservation
  - D. Safety Procedures
    - 1. Operation
    - 2. Maintenance
    - 3. Installation
  - E. Technological Advances
  - F. Regulations
    - 1. Private
    - 2. Government
  - G. Minimum Needs
    - 1. Large
    - 2. Small
- V. Sanitation and Safety (Home and Institutional)
  - A. Sanitation
    - 1. Standards and Laws
    - 2. Insect and Rodent Control
    - 3. Food Spoilage
    - 4. Clean-up
  - B. Safety
    - 1. Standards
    - 2. Laws
- VI. Management (Home and Institutional)
  - A. Energy (Human) Conservation
    - 1. Mental Attitude
    - 2. Physical Influences
    - 3. Analysis of Tasks
    - 4. Work Sequence
    - 5. Assembly Work
  - B. Time Conservation
    - 1. Use
    - 2. Schedules
    - 3. Effect on Family Relations
  - C. Work Simplification
    - 1. Time and Labor Saving Devices
    - 2. Dovetailing Tasks
    - 3. Job Analysis

    4. Attitudes
- D. Organization of Kitchen
    1. Layouts
    2. Centers and Work Areas
    3. Arrangement of Equipment
    4. Storage Areas
    5. Group Cooperation

FOODS AND NUTRITION MODULES
FOR
ADULT EDUCATION

FOODS AND NUTRITION

Modules for Adult Education

This section includes five concepts in Foods and Nutrition which were developed into mini-units or modules to encourage teachers to make adult education an integral part of the Vocational Home Economics programs. The modules are:

Cake Decorating
Creative Cookery
Food Preservation
Nutrition
Time, Energy and Money

A single module may be used or any combination of modules depending on the time allotment, the needs and interests of the students and the facilities available. The teacher may extract additional concepts and learning experiences from Levels I - V if pertinent to the particular group. These brief modules were designed for the following audiences:

Night Classes
Extended Programs
Out-of-School Youth
Postsecondary

Difficulty in publicizing offerings to appropriate audiences sometimes causes the teacher to hesitate to offer an expanded home economics program. The following suggestions may be helpful in reaching prospective adults:

-utilize newspaper and public service announcements.
-contact parents through Head Start, P.T.A. and take-home letters.
-secure the assistance of community leaders.
-cooperate with area home economists.
-place posters in local business establishments.

-set up a fair booth publicizing the program.
-contact civic, social, and professional organizations.
-utilize FHA members in securing enrollment.
-conduct an interest survey.
-hold a special meeting introducing the program; serve refreshments and give door prizes.

ADULT LEVEL
CAKE DECORATING MODULE

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Tools and Equipment for Cake Making	Identify tools and equipment for measuring, mixing, and baking a cake.
Measuring	-Identify types of cake pans. -Demonstrate preparation of pans and correct measuring and mixing utensils. -Select appropriate tools for a specific cake and place on tray. -Discuss the relationship between correct equipment and finished product.
Mixing	Determine how mixing and baking affects the finished product.
Baking	-Compile a list of standards for a good cake. -Demonstrate making cakes from a recipe and from a mix. Show preparation, filling of pan, application of magic strips, cooling and crumbing. -Prepare cakes using a recipe or a mix. -Evaluate cakes according to established standards.
Icings	Demonstrate skill in preparing frosting and applying to cake.
	-Demonstrate the preparation of decorator frostings. -Ice and seal a cake brought to class.

ADULT LEVEL - Cake Decorating

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Borders and Decorations	Demonstrate skills in preparing borders, and types of decorations.
Leaves Flowers Figures Writing	-Demonstrate the use and care of decorator equipment. -Demonstrate borders and other types of decoration. -Practice each type decoration to develop desired level of skill. -Develop guidelines for choosing decorations appropriate for a cake. -Practice various decorations on waxed paper. -Prepare, ice, and decorate a cake for a specific occasion. -Compare cost of a professionally decorated cake with a cake made by individual at home.
Wage Earning Skills	Research opportunities for wage earning.

ADULT LEVEL
CREATIVE COOKING MODULE

Concepts and Subconcepts | **Behavioral Objectives and Learning Experiences**

Cooking with a Flair

Cook creatively on a budget.

- -Share ideas for creative cooking using economical foods and special equipment.
- -Exchange personal recipes containing low cost foods.
- -Experiment with recipes at home.
- -Select the most appealing dish and have a class buffet.

Use spices, herbs, wines and liqueurs to enhance food flavors.

- -Smell and taste some unusual herbs and spices.
- -Invite a connoisseur of wines to acquaint participants with types and uses.
- -Have a wine and cheese party.
- -Locate recipes which contain liqueurs and prepare in class.
- -Visit a restaurant, observe techniques and ingredients used by the chef, study the menu, and place an order using correct terminology.

Recognize the use and care of appropriate tools.

- -Locate and demonstrate the use of:
    - crepe maker
    - wok
    - slow cooker
    - yogurt maker
    - electric cookie press
    - microwave oven
    - electric skillet
    - electric saucepan
    - fondue pot
    - warming trays
    - bun warmer
    - chafing dish
    - deep-fat fryer
    - blender
    - food processor
    - electric knife
    - rosette iron

ADULT LEVEL - Creative Cooking

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Cuisines Around the World	Identify various types of cutlery - gourmet gadgets. -Distribute and review a list of culinary terms. Serve and arrange foods attractively. Research foods and customs typical of different parts of the world and appropriate culinary terms. Acquire information on costs and availability of ingredients. -Research foods and customs of other countries and prepare a talk to present to the class. -Interview people who have recently moved to the United States. Ask them to describe some of the most popular foods in their native country. -Compare American cuisines with those of other countries. -Locate, distribute, and discuss recipes using metric terminology. -Select a menu of six or seven courses which is characteristic of a particular country. Serve as a buffet luncheon. -Plan and prepare a party food from another continent to be served at an appointed time and place such as at the school, a home, recreation center, garden or pool party, or a picnic. -Organize a gourmet club that will meet at specified times and share techniques of preparing healthful, reasonably priced, attractive foods.
Outdoor Cooking	Choose foods and equipment for outdoor cooking. Use safety precautions and sanitation procedures. -Discuss the following topics related to outdoor cooking:

  - types of outdoor cooking
  - location sites for cookouts and campfires
  - kinds of grills, their use and appropriate cost
  - special barbecue equipment and supplies
  - basic safety and sanitation rules
  - foods suited for grilling
  - acceptable menus
  - complementary sauces and ingredients
  - types of service.

-Plan and serve an outdoor meal.
-Invite a resource person to demonstrate techniques used by campers.

Foods as Gifts

Prepare and package food for creative gift-giving.

-List occasions for giving.
-Discuss suitability of foods for packaging.
-Determine appropriateness for the recipient.
-Demonstrate types of packaging and containers.
-Display various containers available on the market.
-Collect pictures from magazines illustrating gift and share packaging ideas.
-Choose an occasion to plan and prepare appropriate food and creative packaging.
-Plan, prepare, and package a gift for a special person.

ADULT LEVEL
FOOD PRESERVATION MODULE

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Foods for Preservation	Select appropriate foods for different methods of preservation. -Define food preservation. -Compare food preserved at home with food bought in the store. -Compare cost and quality of home-frozen or home-canned with fresh variety. -Decide when food preservation becomes a gourmet project. -Decide which type of food preservation is best suited to participant's family.
	Identify the care that must be given in getting food ready for preservation. -List qualities to be considered when choosing foods to preserve. -Discuss the handling of the food prior to preservation. -Select methods best suited to the food. -Invite a local extension home economist to demonstrate how to can fruits and vegetables properly.
Methods of Preservation	
Freezing	Demonstrate correct procedure in preserving foods by freezing. -Review vocabulary used in freezing foods. -List food items that are not suitable for freezing. -Exhibit available packaging for frozen foods and list advantages and disadvantages of each type. -Prepare a folder with information on freezing principles and directions.

Demonstrate the steps involved in freezing fruits and vegetables.

- Blanching of vegetables.
- Freezing fruit with sugar.
- Freezing fruit with sugar syrup.
- Freezing fruit with only ascorbic acid.
- Packaging, sealing and labeling containers.

Canning

Follow correct procedures and develop skills in canning.

- List the equipment needed for home canning.
- Distinguish between two methods of processing.
- Identify the kinds of food suitable to each process.
- Determine the difference between steps in canning fruits and vegetables.
- Establish criteria for canned fruits and vegetables.
- Can foods using a variety of methods.

Preserving

Develop skills in preserving with sugar and vinegar.

- List key words related to processing with sugar.
- List the equipment needed for preserving with sugar.
- Observe and discuss the differences of jelly, jam, preserves, conserves, and marmalade.
- Select a preservation method and prepare a food.
- List key words associated with processing with vinegar and brine.
- Investigate reasons for using special equipment for products with vinegar and brine.
- Prepare a pickled product.

Storage

Follow correct procedures in storing preserved foods.

- Evaluate various areas suitable for foods in cans or jars.
- Determine a good method for arranging foods in an upright freezer and a chest type freezer.

ADULT LEVEL
NUTRITION MODULE

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Balanced Diets	Explain the importance of Food and Nutrition Board's Recommended Dietary Allowances.
Relation of Food to Health, Appearance, Physical Vitality, Mental Illness	-Discuss importance of health to one's happiness and well-being. -Discuss signs of good and poor health. -Relate the daily food guide to the diet and good eating. -Show filmstrip on nutrition. -Keep record of kinds and amounts of food eaten for one week. -Analyze and compare to RDA. -List foods containing "empty calories." -Calculate the calories from each nutrient in a day's diet. -Select daily food following recommended reduced calorie intake.
Special Diets	Select food that will maintain optimum health for persons having special dietary needs.
Weight Control	-Discuss foods that should be avoided or included for overweight; underweight. -Develop a regular eating plan to keep weight at a normal level and follow plan. [illegible] that can be adapted for normal, overweight [illegible] to discuss value of physical fitness.

Pregnancy and Lactation	Compare relationship of birth weight to health defects in the newborn. -Invite a qualified nutritionist to speak on the diet of the expectant mother. -Exhibit literature from local public health office on nutrition during pregnancy and lactation.
Geriatric	Determine major causes of poor nutrition among elderly people. -Compare nutritional needs of young people with those of the elderly. -Prepare suggestions to help older people enjoy nutritious, easy-to-prepare meals.
Therapeutic	Relate the importance of good eating habits to the prevention and control of diseases. -Discuss the importance of planning and preparing balanced meals that can help to protect persons from heart and circulatory diseases. -Invite a medical doctor to speak on foods to be avoided by persons having various health problems.
Infants and Young Children	List the guidelines for establishing good eating habits in babies and young children. -List advantages and disadvantages of breast-feeding. -Observe new babies in families and compare the different ways they take their milk. -Discuss differences in the way babies eat when there is more than one child in the family. -Observe and compare children from one to three years of age as they eat. Note what they eat, time of day they eat, and how they eat. -Have parents of an infant and parents of a three-year-old child discuss feeding problems of each age and how they are overcome. -Brainstorm and list ways to prevent feeding problems for toddlers. -Develop a feeding plan so that a baby will be healthy and enjoy the foods needed.

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
	-Visit a nearby food store to read labels. Compare prices and note the variety of foods available for children. -Demonstrate home preparation of food for feeding infants, utilizing a blender. -Discuss ways to introduce new foods successfully into the diet of a baby. -Compare the physical and emotional characteristics of a poorly nourished one-year-old child. -Describe the food needs of children from one to three years old.
Adolescents	Apply standards of good nutrition in planning appropriate meals for adolescents. -Contrast quantities of food for an active adolescent girl and an active adolescent boy. -Have adolescent list daily intake of food, including snacks, for a seven-day period. Analyze with RDA and calorie count as criteria. -Invite a nutritionist to discuss the need for a well-balanced menu for the growing adolescent.
Life-styles and Food	Identify factors in the evolution of meal patterns and eating habits. -Discuss the idea, "We Are What We Eat." -Compare social and/or holiday food traditions. -List cultural and religious customs that affect food choices. -Conduct research on a geographical area of this country (or other countries) to determine effect on dietary habits. -Choose a fast-food chain restaurant in the area and evaluate its menus; compare to others of same types. -Check newspaper and magazines for articles that describe developments in food production and processing that may affect future eating habits. -Explore changing meal patterns for greater flexibility in meeting changing social and economic conditions.

Food Fads, Fallacies, and Facts	Identify food fads, food scares, food quacks as compared to dependable information on food. -Analyze food advertisements for nutritive information, emotional response, and adequacy of information. Make recommendation for improvement of ad. -List ways to recognize a food quack or an untrustworthy claim. -List food scares that have occurred. -Identify food fads and diets. -Choose one fad diet and evaluate it, using the USDA Daily Food Guide. -Interview older persons and make a list of "old wives' tales." -Name reliable food information sources. -State main requirements of federal labeling laws. -Discuss consumer responsibilities in the improvement of the quality of food. -Visit a health food store and observe the different foods available and their nutritional qualities and compare with similar items in supermarket. -Select a recipe from a natural foods cookbook and adopt a recipe from a standard cookbook and make comparisons.
A Safe Food Supply	List several sources of food contamination and identify common food poisoning bacteria. -Invite a guest speaker from the public health service, Department of of Agriculture, Environmental Protection Agency or the Food and Drug Administration to discuss food safety. -Visit and survey restaurants and supermarkets in the area, rating them on food safety. Discuss results. -Discuss observation of violation of food laws in the area. -Write appropriate agency and share letters with class before mailing. -Prepare and present fact sheets on bacteria that are common causes of food poisoning and ways to avoid food poisoning in kitchens and restaurants. -List ways to avoid food poisoning in public eating facilities. -Research laws that protect food supplies, noting purpose of each.
Related Occupations	Identify career opportunities in nutrition and food service.

ADULT LEVEL
TIME, ENERGY AND MONEY MODULE

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
Trends in Equipment	Analyze trends in kitchen equipment.
Microwave Food Processor Blender Slow Cooker Trash Compactor Disposals Dishwashers	-Bring magazine articles featuring new appliances to class and discuss. -Plan a field trip to an appliance store(s). Survey new appliances for features, cost, brand, use, care and service. -Invite a speaker from Cooperative Extension Service or a utilities company to demonstrate appliances. -Experiment with appliances available in the department or other sources. -Collect pamphlets on various appliances. -Compile a list of appliances compatible to a particular life-style. -Compile metric information sheet pertaining to kitchen equipment.
Selection of Equipment	Make decisions in purchasing appliances.
	-Present a filmstrip on consumer practices which include warranties, credit, and suitability of product to family needs. -Compile a checklist of basic features to look for in major appliances. -Study warranties and guarantees brought to class for interpretation of terms. -Discuss legal remedies available if consumer and warrantor cannot arrive at a settlement. -Share experiences in appliance purchases including poor choices, wise selections, and future plans for purchases.
Organization of Work Centers	Plan and arrange a kitchen for maximum organization and efficiency.

	-Illustrate basic kitchen shapes and arrangements. -Discuss advantages and disadvantages of each. -Define work centers and discuss basic locations. -Identify work centers in school lab, make suggestions for improvements in organization. Compare rearranged unit with original plan and rate for efficiency. -Develop a plan for placement of equipment and supplies at home and rearrange according to plan. Rate for effectiveness. -Explore ideas for future personal kitchen planning. -Draw plans for an ideal kitchen.
Conservation of Personal Energy	Simplify performance tasks. -Conduct a survey to determine ways to save time and energy in the kitchen. -Compile a list of shortcuts and time-savers from the survey. -Select, plan, and prepare a menu which requires minimum preparation. -Conduct a taste testing party to compare different forms of food. -Investigate and compare types and forms of convenience foods. -Make a comparative study of commercially prepared convenience foods, home prepared convenience foods, and traditionally prepared foods. Consider: time, energy, money, and product. Plan, prepare, and serve practical meals for working homemakers. -Plan a week's menus for the working homemaker using knowledge of work simplification, convenience foods, time-saving equipment and evaluate the week's menus. -Kitchen test menu suggestions. -Select and compile a list of most popular menu suggestions.
Budgeting the Food Dollar	Identify ways to stretch the food dollar. -View and discuss filmstrip on good buying habits. -Study current reliable magazines for tips on good buying practices. -Discuss information on food labels and how they can help the consumer. -Compare name brands, store brands, and/or generic no-name brand foods. -Recall the regular price of certain foods and household items.

Concepts and Subconcepts	Behavioral Objectives and Learning Experiences
	-Form committees to investigate marketing techniques used to encourage consumer impulse buying. -Recall instances in which advertisements influenced food purchases. -Compare advantages and disadvantages of different types of stores -- chain food stores, [illegible] cooperatives, 24 [illegible] -Consider factors [illegible] buying. -Invite speaker [illegible] to conserve fue[illegible] -Discuss fuel-sa[illegible] -Discuss energy-[illegible]
	Plan and prepare fam[illegible]
	-Define terms rela[illegible] -Determine factors [illegible] -Reach a consensus on [illegible] to food. -Keep a record of food expenses for two weeks. Figure percentage of income spent. Evaluate purchases. -Complete a simulation exercise in which various incomes and situations are stated. -Plan a week's menu, make a shopping list, select a store and get prices of items. Compare actual spending to suggested percentage.

OCCUPATIONAL FOOD SERVICE

This guide was designed to be used by teachers and coordinators in promoting and teaching food service to secondary home economics students in the eleventh and twelfth grades or for developing programs for out-of-school youth and adults.

Teachers who believe that their programs may be strengthened by adding food service to the curriculum should request a copy of Guidelines for Developing Occupational Home Economics Programs: A Project Report by Dr. Ann Kapp and Dr. Daisy Daniels. Requests should be made to Department of Home Economics, Northeast Louisiana University, Monroe, or Home Economics Section, Division of Vocational Education, Department of Education, P. O. Box 44064, Baton Rouge, Louisiana 70804.

Instructional materials designed for both teacher and student may be obtained from Mid-American Vocational Curriculum Consortium, Oklahoma State Department of Vocational and Technical Education. Costs are minimal and price lists may be obtained from the consortium at Stillwater, Oklahoma 74074.

In this abbreviated resource unit, levels have been used as a means of identifying the length of time students spend in a program.

Level I was designed for students entering food service for the first year. The major concepts to be emphasized are Orientation to the World of Work, Orientation to Food Service, Sanitation and Safety, Selection, Use and Care of Equipment, Management, and Principles of Food Preparation Service. This is designated as preparatory level.

Level II was designed for those students entering food service for the first semester of the second year. Concepts emphasized are Entry Level Jobs in the areas of Preparation, Service and Related Areas. These concepts may take 6 to 8 weeks each depending on the progress of students. Experience in some type food service program is recommended at this stage.

Level III was designed for those students who have completed Levels I and II. Major concepts to be emphasized are Intermediate Level Jobs in the areas of Preparation, Service and Related Areas. At this level it is necessary that the student participate in laboratory-simulated or on-the-job experiences.

After completion of the entry level positions, the student will complete a formal application for an intermediate level job. A job description will be given for each job and advertised by the teacher. Students will submit a resume along with an application which should be kept on file. Students will make appointments and go for interviews to receive job assignments.

Individualized training kits may be developed for students in preparation for the job for which he or she is accepted. A complete log of activities should be kept for each station. When a student has successfully completed training on one job, he or she may fill out another application for a new position advertised.

LEVEL I FOOD SERVICE

Conceptual Outline

I. Orientation to the World of Work
  A. Changing Roles of Men and Women
  B. Job Opportunities, Application, Resume
II. Orientation to Food Service Occupations
  A. Food Service Industry
  B. Career Ladder
III. Sanitation and Safety
  A. Housekeeping
  B. Food Handling and Storage
  C. Common Food Borne Illnesses
  D. Safety Practices
IV. Selection, Use and Care of Equipment
  A. Identification of Equipment
  B. Care of Equipment
  C. Hazardous Equipment
  D. Less Hazardous Equipment
  E. Hand Tools and Utensils
V. Microwave Cookery
  A. Selection and Purchasing
  B. Use
  C. Care and Maintenance
VI. Management
  A. Work Simplification
  B. Standardized Recipes
  C. Portion Control
  D. Buying
VII. Priciples of Food Preparation and Service
  A. Table Service
  B. Nutrition
  C. Salad, Sandwiches, and Fruit
  D. Soups and Sauces
  E. Vegetables
  F. Breads
  G. Rice and Pasta
  H. Pastry and Pie Fillings
  I. Cakes and Cookies
  J. Spices and Flavorings
  K. Meats, Poultry, Seafood
  L. Eggs and Cheese
  M. Breakfast Cookery
  N. Beverages

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. ORIENTATION INTO THE WORLD OF WORK	RECOGNIZE AVAILABILITY OF JOB OPPORTUNITIES AS IT RELATES TO JOB SKILLS.
A. Changing Roles of Men and Women	List roles that were once considered exclusively those of men or women ten years ago.
Occupational Trends	-Define terms relating to the world of work. -Survey the community for replacement needs in food service occupations.
B. Job Opportunities	Provide job information by use of panel of managers of food service establishments. -Consult local or state employment service for suggestions on job opportunities. -Read want ads for job opportunities in newspaper or trade journals. -Check bulletin board in supermarket for job opportunities. -List other means for finding a job.
Job Application	Secure as many job applications as possible and practice filling in correct information.
Job Resume	Discuss characteristics of a resume. -Prepare a job resume and an appropriate cover letter.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
II. ORIENTATION TO FOOD SERVICE OCCUPATION	COMPARE CHANGES THAT HAVE OCCURRED IN THE FOOD INDUSTRY.
A. Food Service Industry	List and explain terminology relating to the food service industry. -View filmstrip on the food industry. -Read and discuss pamphlet on Careers for Youth in the Food Service Industry. -Explain the growth of the food service industry. -Tape an interview with a restaurant owner and play it back to the class.
B. Career Ladder Busgirl/Boy Waiter/Waitress Host/Hostess Sandwich Maker Beverage Worker	Identify job opportunities in the area. -Pre-test on interest and experience. -Report on food service jobs in the area. -View filmstrips and/or Career Education Series on jobs of interest to them. -Read and discuss pamphlet on careers in food service. -Use handbook to discover information on food service occupations. -Listen to discussion by parish dietitian on food service occupations and opportunities for advancement.
III. SANITATION AND SAFETY	DESCRIBE AND/OR DEMONSTRATE CORRECT PROCEDURES AND CLEANING AGENT FOR VARIOUS JOBS.
A. Housekeeping	-Identify the housekeeping tasks that should be done on a routine basis.

- -List equipment and supplies to be used for cleaning jobs.
- -Clean and sanitize furniture, floors, and other surfaces in the serving area.
- -Store housekeeping supplies correctly.

B. Food Handling and Storage

Apply principles of storage for dry, refrigerated and frozen foods.

- -Identify foods which require dry storage from other items.
- -Follow correct sanitation procedures in the storeroom to prevent food spoilage and damage from pests.
- -Mark or tag, all perishable foods received, following correct procedure.
- -Arrange foods for best air circulation in refrigerators and freezers.
- -Wrap all foods properly before freezing.
- -Demonstrate correct procedures for storing food and non-food items in dry storage areas.
- -Demonstrate correct procedures used in food service facilities for refrigerated storage of perishable foods.
- -Plan a HERO program on energy conservation.

C. Common Food-Borne Illnesses

Recognize the importance of temperatures in providing safe foods.

- -Make smears on prepared agar for culture growth. Make one with unwashed hands, hands rinsed in cold water, hands washed in hot soapy water. Observe the growth during the week. Draw implications.
- -List accidents that occur in the kitchen and discuss preventive measures.
- -Prepare individual reports on food-borne illnesses.
- -Take unit test.
- -Visit food service establishments and note any unsanitary practices.
- -List the common food-borne illnesses and the foods with which they are associated.
- -List proper temperatures for cooking, holding, storing, and reheating foods.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
D. Safety Practices	Recognize potential safety hazards. -View filmstrip "Work Smart-Be Safe," if available. -Role play situations where accidents occurred. -Practice the rules of safety. -Make safety posters and post in work area. Identify classes of fires and extinguishers. -View filmstrip "The Angry Flame." -Determine if fire hazards exist in foods lab. -Watch a demonstration by fire marshal on using the fire extinguisher. -Use correct emergency procedures for executing a fire drill. -Explain fire emergency procedures.
IV. SELECTION, USE AND CARE OF EQUIPMENT	IDENTIFY EQUIPMENT AND DEMONSTRATE CORRECT USE.
A. Identification	Identify correctly each piece of equipment to be used. -Demonstrate proper use of equipment using video recorder. Replay and evaluate. -Review transparencies showing large equipment. -Evaluate by writing the names of each piece of equipment shown. -Evaluation may be made orally by identifying equipment.

B. Care of Equipment	Outline information sheet on procedures for cleaning equipment. -View filmstrips on cleaning equipment. -Demonstrate correct cleaning and maintenance of equipment. -List equipment and supplies needed for cleaning each piece of equipment. -Examine material of which equipment is made and select appropriate cleaning agent.
C. Hazardous Equipment	Under the direct supervision of the instructor, demonstrate a piece of hazardous equipment. -Read operating manual for each piece of hazardous equipment. -Take a tour of foods lab and cafeteria kitchen. -Demonstrate the correct use of equipment. -Note precautions that should be taken in using and cleaning hazardous equipment.
D. Less Hazardous Equipment	Identify pieces of equipment by writing the name of the pictured piece of equipment. -List steps for operating equipment. -Use same procedures for operating less hazardous equipment. -Demonstrate use of less hazardous equipment.
E. Hand Tools and Utensils	Practice using hand tools safely.

V. MICROWAVE COOKERY	RESEARCH THE ADVANTAGES AND DISADVANTAGES OF MICROWAVE FOOD COOKERY.
A. Selection and Purchasing	List factors to consider when selecting and purchasing a microwave oven. -List features of major brands of microwave ovens. -Compare capacity of each brand to be considered.

LEVEL I (Food Service)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-View filmstrip on microwave cooking. -Invite a home economist to demonstrate the microwave oven for an FHA/HERO meeting.
B. Use	Compare microwave cooking with conventional cooking in terms of energy, time, and quality of product.
	-List and demonstrate appropriate cooking equipment. -Adapt recipes to microwave cooking. -Study use and care manual carefully.
C. Care and Maintenance	Demonstrate use, care, and maintenance of the oven.
	-Prepare simple foods in the microwave oven.
VI. MANAGEMENT	DEMONSTRATE PROFICIENCY IN CONSERVING TIME AND ENERGY BY PLANNING AND PRACTICING EFFECIENT METHODS FOR ASSIGNED TASKS.
A. Work Simplification	-Review kitchen arrangement and work centers. -Review basic guides in management of time, motion, equipment, and use of space. -Demonstrate techniques to show how time and effort can be saved in food preparation. -Divide into groups. One group will have a tray and list of equipment needed; the other group will have no list. Use a stop watch to determine how much time was saved with list.

	-View filmstrip "How to Save 30 Minutes a Day." (Rubbermaid) -Perform a motion study for an assigned task.
B. Standardized Recipes	Differentiate between standardized and non-standardized recipes. -Read textbook for terminologies and related information. -Explain standardized recipes and give the advantages and/or disadvantages of using them. -View filmstrip and show how to use a recipe. -Study recipe symbols, abbreviations, weights and measurements including metrics. -View demonstration on using a standardized recipe. -Choose a dish and prepare one using a standardized recipe and two using non-standardized recipes. (This may be done in groups.) Evaluate.
C. Portion Control Equipment Used	List and explain how pieces of equipment are used in controlling portions. -Discuss portion control and how it is used in food service. -Demonstrate portion control. Discuss problems resulting from poor control. -Observe the serving line in the lunchroom. Report observation to the class. -Serve on the line in the lunchroom for experience.
D. Buying	Identify terminology related to this unit such as staples, perishable and non-perishable goods. -Read and discuss buying foods. -Read and evaluate newspaper sale ads. -Study plentiful foods list provided by the USDA. -Read textbook for information on purchasing quantity foods, storing and rotating supplies. -Tour grocery store and compare cost of items from a prepared list. -Store a group of items correctly. -Choose proper storage temperature for specific items.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Observe different types of storage facilities on a tour of a food service establishment. -Research and report on the shelf life of different foods. -Study chart on length of time for keeping foods by refrigeration; freezing.
VII. PRINCIPLES OF FOOD PREPARATION AND SERVICE	IDENTIFY TYPES OF TABLE SERVICE AND DETERMINE WHEN EACH IS APPROPRIATE.
A. Table Setting	Explain and demonstrate types of table service. -Read textbook for terms associated with table service. -Display inexpensive table settings which are coordinated. -Practice setting the table using different menus. -Identify items used for a cover. -View slides on the "Training of a Sales Host and Hostess." -Discuss "throw away service" and compare cost with traditional service. -Compare table settings for a full service restaurant and a fast food operation.
B. Nutrition	List important nutrients found in each food group. -Discuss ways of preserving nutrients in food preparation. -Make a bulletin board by using pictures from magazines of foods representative of each group.

C. Salad, Sandwiches and Fruits

Prepare a variety of sandwiches, salads and fruits.

-List types of salads.
-Discuss the place of salads in the menu.
-Describe characteristics of quality salads.
-Select appropriate salads for different uses in the meal.
-Make a list of greens that can be used for salads.
-Describe and/or demonstrate correct procedures for preparing greens for a salad. (Use filmstrip if available)
-Visit a restaurant/cafeteria to observe preparation.
-Secure information on sandwich making from a professional chef.
-Discuss categories of sandwiches and list characteristics of a good sandwich.
-Work in groups preparing sandwiches using assembly line production.
-View demonstration on fancy sandwiches.
-View a filmstrip or transparencies on types of fruits and vegetables.
-Classify fruit according to source (bingo and crossword puzzles).
-Demonstrate correct procedures for preparing fruit.
-Explain the purpose of cooking fruit.
-Prepare a fruit plate.
-Calculate costs of food, labor and other overhead and determine menu pricing.

D. Soups and Sauces

Prepare and compare frozen, canned and dehydrated soups.

-Explain terms associated with soups.
-List and discuss groups of soups.
-List kinds of soups and find examples of each.
-View demonstration of a white sauce.
-Prepare white sauce for soups.
-Divide into groups; each group prepares a cream soup.
-Invite a representative of a food distributer to display and discuss commercial food supplies.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
E. Vegetables	Prepare and serve a variety of vegetables correctly.
	-Cite principles of vegetable cookery. -Observe correct procedures for preparation of fresh, frozen and canned vegetables.
F. Breads	Prepare a quick bread.
Quick	-Define quick breads. -Read resource material on breads. -Explain the purpose of bread in the diet. -List types of quick breads and ingredients used. -Observe demonstration on biscuits, muffins, griddle cakes, and popovers. -Compute cost per serving of various quick breads. -Compare cost of convenience vs "scratch."
Yeast	Prepare yeast breads.
	-List and define terminology associated with yeast bread. -List ingredients used in yeast bread and explain the purpose of each. -Observe demonstration of yeast bread. Suggestion for three-day cool-rise method. Day 1 - Prepare dough; oil, cover; let rise in refrigerator. Day 2 - Punch down; let rise; shape, grease; refrigerate. Day 3 - Remove from refrigerator; let stand; bake; evaluate.
G. Rice and Pasta	Prepare a selection of main course dishes using pasta and rice as extenders.
	-Visit a local grocery store and note the variety of pasta available.

Using your findings make a creative bulletin board of pasta "people" and label them. Example: Macaroni - Mary, Spaghetti - Betty, and Noodle - Norman.

-Prepare a variety of casserole dishes which include pasta.
-Prepare rice using proper cooking techniques.
  a. steamer method
  b. stockpot method
-Select a variety of appetizing rice recipes to be prepared.
-Evaluate recipes and compute cost per serving.

H. Pastry and Pie Filling

Prepare pie shell and filling correctly.

-Review and discuss pastry and pie fillings.
-View demonstration on filmstrip and by teacher.
-Prepare and serve a variety of pies. Evaluate.

I. Cakes and Cookies

Prepare, bake and serve several types of cookies and cakes.

-List types of cookies and cakes.
-Discuss methods of preparing cakes and cookies.
-List types of icings.
-Observe demonstration on making cookies.
-Plan and prepare cookies.
-Repeat activities for cakes and icings.
-Evaluate.

J. Spices and Flavorings

Prepare an assigned recipe which uses spices, herbs or extracts.

-Identify spices, herbs, and extracts that are available.
-List spices and flavoring you are familiar with.
-Participate in a tasting lab on spices, herbs and extracts.
-Examine bottles, jars and boxes of spices.
-Identify the seasonings by the shape of leaves, by fragrance, or by taste.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
K. Meats, Poultry and Seafood	Prepare meats, poultry and seafoods following correct principles of cookery. -Review names of different cuts of meat. -Explain grading and inspecting. -Discuss other terms associated with meats. -Explain proper methods for care and storage of meats, poultry and seafood. -Discuss methods for preparing meats by moist or dry heat. -Explain the use of the meat thermometer. -Prepare meats using the proper techniques in dry heat cookery. -Repeat, using moist heat. -Prepare selected meats in microwave oven.
L. Eggs and Cheese	List the principles of cheese cookery. -View filmstrips on cheese cookery. -List the classes of cheese. -Compare cheese cooked at too high a temperature and one at correct temperature. -Display a variety of cheeses and suggest uses for each variety. -View filmstrip on "The Incredible, Edible Egg," and work activities assigned. -Prepare eggs. a. omelet c. fried egg b. scrambled eggs d. hard cooked egg -List purpose of egg function in recipes. spoon bread croquettes cream puffs ice cream (Try one or more recipes to observe leavening, binding, emulsifying, or thickening.) -Prepare a souffle and custard.

M. Breakfast Cookery

Plan, prepare and serve a simple breakfast.

- -Participate in breakfast survey.
- -Identify menu patterns for breakfasts.
- -List the order for serving a breakfast meal.
- -Explain the continental breakfast and the reason for its popularity.
- -Prepare and serve a light breakfast.
  - Note pre-preparation and actual preparation time.
  - Note time for serving.
  - Note average time used for eating.
  - Repeat the steps for medium and heavy breakfasts.
  - Compare cost of meal, time used for preparation and time used for eating.
- -Serve a breakfast meal to faculty.
- -Evaluate results.

N. Beverages

Demonstrate methods for making perked, dripped and instant coffee, tea, cocoa and other beverages.

- -Read textbook for terminologies associated with beverage making.
- -Serve beverages correctly.
- -Evaluate.

LEVEL II FOOD SERVICE

Conceptual Outline

Entry Level

I. Preparation
    A. Cook's Helper
    B. Kitchen Helper
    C. Baker's Helper
    D. Sandwich Maker
    E. Beverage Worker
II. Service
    A. Waiter/Waitress
    B. Busboy/Girl
    C. Fountain Worker
    D. Counter Service
    E. Fast Food Worker
III. Related Areas
    A. Porter
    B. Dishwasher
    C. Cashier
    D. Caterer's Helper
    E. Food Store Clerk

LEVEL II (ENTRY - Food Service)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. PREPARATION	PROVIDE JOB DESCRIPTIONS AND QUALIFICATIONS FOR PREPARATION LEVEL.
A. Cook's Helper B. Kitchen Helper C. Baker's Helper	Perform basic skills for each job at the entry level. -Compare lab worksheets on procedures for actual food preparation: assemble, measure and weigh ingredients needed. prepare fillings, mixes, toppings and sauce according to needs. prepare meats for cooking. clean all vegetables for storage and cooking. store meat, poultry and fish in refrigerator or freezer. store eggs, milk, butter and cheese in refrigerator. -Follow safety and sanitation procedures: clean and wash small equipment and pots and pans used in cooking. clean and wash kitchen work areas.
D. Sandwich Maker	List training or experiences needed to get a job as a sandwich maker. -Make a list of types of sandwiches available. -Interview a sandwich maker. -Review types of equipment sandwich makers use. -Create unusual and interesting sandwiches to be served. -Evaluate.
E. Beverage Maker	Creat unusual and creative beverages. -Define terms related to the preparation of beverages. -Prepare and serve coffee with chocolate ice cream, with nutmeg and with whipped cream and chocolate slivers.

LEVEL II (ENTRY - Food Service)

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Prepare and serve tea with various garnishes. -Prepare and serve hot chocolate using a variety of garnishes: whipped cream, ice cream, or marshmallow products. -Select beverage recipes for a taster's party.
II. SERVICE A. Waiter/Waitress B. Busboy/Girl C. Counter Service D. Fast Food Worker E. Fountain Worker	SECURE JOB DESCRIPTIONS FOR EACH SERVICE JOB LISTED. -Discuss requirements and responsibilities for each job. -Estimate the amount of money that can be realistically expected from each job. -List equipment necessary for each job. -Divide class into working groups. Work in a "simulated-job-experience" in each area on a rotating basis. -Plan field trip to a fast food establishment and observe fountain operations.
III. RELATED AREAS A. Porter B. Dishwasher	SECURE JOB DESCRIPTIONS FOR EACH OF THE RELATED JOBS. -Discuss requirements and responsibilities of each job. -Estimate the amount of money that can be realistically expected from each job.

C. Cashier

D. Caterer's Helper

E. Food Store Clerk

-Investigate employment opportunities in the area; identify sources such as restaurants, store, hospitals, etc.

-Role play the customer along with the related occupations. Have students exchange roles. For example: one student would act as customer while another acts as cashier. Have the class discuss the different personalities.

LEVEL III FOOD SERVICE

Conceptual Outline

Intermediate Positions

I. Preparation
   - A. Roast or Meat Chef
   - B. Vegetable Cook
   - C. Baker
   - D. Butcher
   - E. Pantry Supervisor

II. Service
   - A. Host/Hostess
   - B. Head Waiter/Waitress
   - C. Counter Supervisor
   - D. Steward/Stewardess

III. Related Areas
   - A. Food Checker
   - B. Sanitation Supervisor
   - C. Fast Food Manager

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
I. PREPARATION	IDENTIFY AND APPLY BASIC PRINCIPLES OF FOOD PREPARATION.
A. Roast or Meat Chef	Prepare and carve a roast. -Identify commercial cuts of meat. -Observe demonstration of meat cutting by butcher at local market. -Identify wholesale and retail cuts. -Experiment by cooking less tender cuts. -Experiment by moist and dry heat. -Experiment by varying degree of doneness. -Experiences related to poultry and seafoods will follow this general format.
B. Vegetable Cook	Prepare vegetables to preserve nutrients, color and texture. -Prepare vegetables by using a variety of methods. -Clean a variety of leafy green vegetables. -Demonstrate the cleaning of root vegetables. -Experiment by cooking a small amount of vegetables, adding soda and vinegar. -Observe a demonstration on paring root vegetables. -Prepare a variety of vegetables and arrange to serve cafeteria style.
C. Baker	Perform the duties of a baker. -Identify basic duties of a baker. -Explain terminologies relating to each of the baking areas. -Observe demonstrations on making breads, pastries, cakes and cookies. -Visit a bakery to observe the variety and preparation of baked products.

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	-Prepare baked products in each of the areas. -Organize a bake shop at school. -Prepare custom orders and deliver.
D. Butcher	Assist with cutting meat. -Observe custom cutting of meats from wholesale cuts. -List meat terminologies. -Work with a butcher for "hands on" experiences.
E. Pantry Supervisor	Serve as pantry supervisor. -Secure job descriptions of the pantry supervisor. -Discuss requirements and responsibilities of each job. -Visit food service operations that employ pantry supervisor. -Review inventory forms used.
II. SERVICE	DEMONSTRATE ABILITY TO PERFORM DUTIES AT EACH JOB LEVEL.
A. Host/Hostess	-Secure description of the job of host/hostess. -Become familiar with terminologies relating to the job. -Explain the duties and responsibilities of the job. -Explain the significance of appearance and personality in the job of host or hostess. -Role play customer/hostess situations.

-Visit a local restaurant and observe the host or hostess. Evaluate the manner in which they performed their job.

B. Head Waiter/Waitress

Demonstrate correct procedures for serving customers.

-Practice describing menu items to customers.
-Take menu orders from customers during food service lab. (Use menus developed by students for the lab experience, and an order pad.)
-Demonstrate ability to pass an order to the kitchen correctly.
-Carry trays loaded with food as needed during food service lab. Load, lift and serve.
-Practice correct procedure for removing plates.
-Demonstrate the proper procedure for preparing and presenting the check.
-Practice using the correct procedure for using the change tray.
-Make a list of accidents which may occur when serving food. How can each be prevented? How should each be handled?

C. Counter Supervisor

Demonstrate responsibilities of the counter supervisor and relate the importance of his job to the efficient operation of the service operation.

-Secure information on job description.
-Set up the food service lab for cafeteria service. Arrange items in an orderly sequence.
-Perform tasks in each area efficiently.
    sanitation
    portioning and plating foods
    replenishing the counters
    greeting customers
-Evaluate performances by use of a checklist.

D. Steward/Stewardess

Develop ability to perform the duties of the steward/stewardess

-Identify the duties of the steward/stewardess.
-Role play steward/stewardess position in each situation:
    treatment of guests
    taking orders
    preparing serving trays

Concepts and Subconcepts	Behavioral Objectives, Learning and Evaluation Experiences
	delivering hot and cold foods removing trays -Rotate duties until all class members have performed procedures. -Use checklist to evaluate performances.
III. RELATED AREAS	DEVELOP EFFICIENCY IN USING ADDING MACHINE AND/OR CASH REGISTER.
A. Food Checker	Listen to a food service manager discuss the checking of food items in a commercial food service establishment. -What are the functions of a food checker? -What are the food checker's duties? -Practice checking food items in a cafeteria food service lab. -Practice using the adding machine and cash register. -Become familiar with menu items and prices for classroom activities. -Secure information on job opportunities within the community.
B. Sanitation Supervisor	Define the role of cleanliness in sanitation practices to prevent contamination in handling food, beverages, equipment, utensils and table settings. -Identify good and poor sanitation practices. -Explain legal aspects of sanitation in food service establishment. -Inspect laboratory facilities and rate as a food service facility using sanitation checklist. -Instruct student employees on personal sanitation. -Observe students in preparation and evaluate appropriate sanitary procedures used in commercial food service activities.

C. Fast Food Manager

List responsibilities of a manager in operating a fast foods establishment.

- -Observe a fast foods manager at work and make a list of all the jobs he handles.
- -Discuss responsibilities of the manager such as paperwork, payroll, staff, customers, stock and sanitation.
- -Survey the community and determine the number of fast food operations
- -Define the term franchise.
- -Discuss advantages and disadvantages of franchised operations.
- -Interview a manager to determine the responsibilities to the parent company.
- -Set up well defined plan for operating a fast food operation.
- -Carry out detailed plan:
  - supervise food preparation and service, employees and maintenance
  - check on food cost
  - supervise kitchen
  - purchase supplies
  - evaluate cost of food, labor, and overhead of small operation

APPENDIX A

TEACHING SUGGESTIONS

SUGGESTIONS FOR TEACHING - LEARNING ACTIVITIES

1. Interview
2. Skits
3. Theme writing
4. Bulletin boards
5. Debates
6. General discussion
7. Committee work
8. Small group discussion
9. Individual or group study
10. Oral reports
11. Newspaper articles
12. Field trips
13. Movies
14. Filmstrips
15. Slides
16. Overhead and/or opaque projections
17. Collect want ads
18. Write want ads
19. Employment Security Commission job lists
20. Exhibits
21. Collect materials
22. Observation
23. Role playing
24. Resource person
25. Brainstorming
26. Games
27. Research projects
28. Demonstrations
29. Prepare lists
30. Radio and television programs
31. Projects
32. Illustrations
33. Chalktalks
34. Panel discussions
35. Make files
36. Tests
37. Problem solving
38. Prepare charts and graphs
39. Window displays
40. Write letters
41. Assigned reading
42. Thought problems
43. Prepare speeches
44. Notebooks
45. Scrapbooks
46. Lecture
47. Work experience
48. Participation in career clubs
49. Conduct career assembly programs
50. Learn about career songs
51. Career day
52. Career floats
53. Parent groups

SUGGESTIONS FOR EFFECTIVE USE OF THE LABORATORY PERIOD

1. Thorough, careful pupil-teacher planning is a necessity.

2. A well-organized plan, easily understood and followed, is most important.

3. Do not let students attempt to accomplish more than they can successfully complete in the 50 or 60 minute period. Most students work slower than adults because of lack of experience and skills.

4 General planning should be done at the beginning of the unit. Detailed planning should take place only one or two weeks in advance. Day to day planning takes too much time from class instruction and is not good management.

5. Plan menus that are nutritional but also economical and practical to prepare in the lab. Keep in mind the socio-economic level of the families in the class.

6. Plan menus using one or two dishes that can be prepared in a preparation period, especially when working with techniques of cookery.

7. Do not attempt to prepare too many different kinds of food in one period involving too many new principles or techniques of cookery.

8. When working in a group each student should know exactly what she is expected to do. Student-teacher planning can help students divide the tasks equally taking into consideration the amount of time needed to successfully complete a task.

9. Purchase groceries for the entire week or, better still, for two weeks in advance to save time. Let the emergency shelf, the refrigerator and the freezer work for you and the students. If classes are small, plan a field trip to the grocery store to let students select items on the grocery list. Upon returning to the lab, students can store the groceries using correct storage procedure for each type of food purchased.

10. Staple grocery items and foods in constant use should be kept in each unit. Other items may be divided and placed on trays in each unit to avoid excess traffic.

11. Students should be taught how to operate and care for all major appliances. Use a lab period to demonstrate.

12. Students should be familiar with tools and equipment in the lab. They should know the name of each piece and how to use it correctly to save time.

13. Clean-up duties for the lab period should be planned and assigned so that when each student has completed her particular duty or duties the unit as well as the whole kitchen will be clean and in order. Check and grade performance of clean-up prior to dismissal.

14. A teacher demonstration is an excellent way to teach beginning students some fundamental rules and help them get acquainted with the kitchen. Using a cookie recipe, the following points may be demonstrated and discussed:
    - Reading and understanding terms used in recipe.
    - Setting up a work tray.
    - Measuring ingredients: white and brown sugar, shortening, flour, leavening agents, flavoring, egg and liquid.
    - Demonstrating techniques used in mixing and preparing dough.
    - Correct way to use and preheat oven.
    - Good dish-washing habits and the order of procedure.
    - Removing cookies from baking sheet and cooling.
    - Storage for different types of cookies.

    This same procedure may be followed for a demonstration on preparing quick breads and many other types of foods showing variation in preparing.

15. Help students learn to read and follow recipe instructions carefully by beginning with simple, easy to prepare foods. Be sure the food can be successfully prepared and completed within the 55 or 60 minute period.

16. Plan menus and select recipes that are within the ability and the skill of the student's preparation time.

17. Recipes used in the lab should first be tested by the teacher to anticipate problems which students may encounter. Estimate closest time needed and improvise short cuts.

18. Each student and/or unit should have recipes copied or available for use before the lab period begins, Recipes may be posted on the bulletin board in large print, dittoed, or copied in notebook during planning session.

19. Each unit should be equipped with all the essential equipment and ingredients needed for their work in order to avoid borrowing from other units. This slows down speed and progress of work. Items needed only occasionally may be stored in a central storage area.

20. Students should be taught to check their recipes to be sure all ingredients have been included before baking or cooking begins.

21. Duties should be listed in logical order by individual and by the group so that all food will be ready at the same time when preparing a complete meal.

22. Help students who finish early to think through what they could do to make good use of their time. Example: folding dish clothes, lining garbage cans, putting up bulletin board, preparing basic mix for class.

23. When a food is repeated in a menu or a lab lesson, rotate the experience so that all students learn.

24. Require students to rinse, stack, wash and put away equipment as they finish using it in order to keep a clean and orderly working area.

25. Students should remain in their assigned unit during the lab period unless the teacher calls the group together at one unit to demonstrate or explain a new principle or technique.

26. Larger appliances or special equipment should be stored in a special place accessible to all units. Students should return the appliance or equipment to the proper place when they have finished using it.

27. Plan for students to use special equipment and appliances when available. Set up appliances in each unit and let students rotate and practice use. Example: waffle iron, food processor, blender, crepe maker.

28. Color-keyed kitchens are time-savers in helping to keep equipment in the proper unit. Assign each kitchen a specific color and place a small dot of enamel paint in the corresponding color on each piece of equipment in the unit.

29. Students should not have to look for tools. Help students learn where each item should be placed by the use of drawings of the arrangement of tools and equipment inside the cabinets and drawers.

30. When possible, students should set the table and arrange centerpiece during the preparation period for a complete meal.

31. Artificial flowers and fruit may be kept in the department to be used and arranged for centerpieces when it is impossible to get fresh flowers.

32. While food is being prepared and/or cooking, review the correct principle of cookery that is being used. You might point out how the same principle can be used in preparing other food.

33. While food is cooking and/or students are eating, review the nutritive value of each food in the menu. Table manners may also be reviewed as students eat.

34. While students are working in the lab, give the food or foods being prepared more home carry-over value by suggesting ways that food can be varied to suit individual and family taste. You could also suggest less expensive food that could be substituted and still furnish the same nutritive value.

35. Use the freezer to congeal gelatin mixture for salads and chiffon pies so they can be completed within the class period.

36. The use of the pressure cooker will shorten cooking times for many foods used in family meals.

37. Make better use of the freezer when preparing class meals and food for special occasions.

38. Fruit and chiffon pies, cakes and cookies may be prepared several days in advance and frozen until they are needed to be used by students for a meal.

39. Students may leave a note on the bulletin board or teacher's desk specifying the time of day they wish certain food to be removed from freezer by teacher or another student.

40. Dry ingredients for quick breads and some desserts may be measured and sifted in a pre-preparation period, or a basic home mix may be prepared and used when needed.

41. Use paper plates and cups or napkins for sampling food prepared in the lab if cost is not prohibitive.

42. Use prepared, instant, ready-mix and convenience foods when practical and economical to save time. Be sure that these provide some learning experiences.

43. Make a final check before leaving the laboratory after class or at the close of the school day. Important check points are:
    - All ovens and range tops off.
    - All items covered or stored properly in refrigerator.
    - All electrical cords disconnected.
    - All garbage and waste properly handled.
    - Disposers cleared of waste and properly flushed.
    - Soiled dish towels have been appropriately handled. (DO NOT leave washer and/or dryer running.)
    - Cabinet tops cleared and wiped.
    - Lights and exhaust fans off.

SUGGESTED BASIC EQUIPMENT FOR A KITCHEN UNIT

1	set	Measuring Cups (liquid)
1	set	Measuring Cups (dry)
1		Electric Mixer portable
1		Rotary Egg Beater
1		Pastry Blender
1		Rubber Scraper
1	set	Mixing Bowls (1-2-3 qt. sizes)
1	set	Measuring Spoons
1		Collander
1		Hand Grater
1		Hand can opener
1		Rolling Pin
1		Metal Spatula
1		Chopping Board
1		Dinnerware (5 piece place setting per person)
1		Pie Pan or Plate
1		Cookie Sheet
2		Skillets (8" and 10")
1		Biscuit Cutter
1		Tongs
1		Paring Knife
1		French Knife
1		Slicing Knife (smooth edge)
1		Slicing Knife (serrated edge)
1		Vegetable Peeler
1		Cooking Fork
1		Perforated Spoon
1		Cooking Spoon
1		Wooden Spoon
1		Pancake Turner
1		Canister Set
1		Dish Drainer (if no dishwasher)
1		Muffin Pan
1		Cake Pan (round or square)
1		Cake Pan (9 x 13)
2		Sauce Pans (1 1/2 qt. and 2 qt.)

APPENDIX B

PUZZLES, GAMES, AND DISPLAY IDEAS

OUTSTANDING KITCHEN AWARD

(OK AWARD)

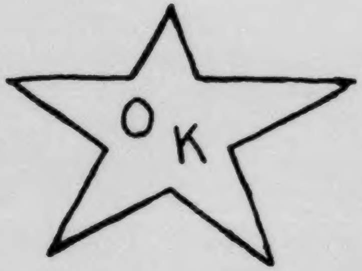
PURPOSE: The purpose of the OK AWARD is to motivate students to do their best in a foods laboratory.

The OK AWARD can be made of various materials -- felt, construction paper, plastic, cardboard, etc. One example of a design might be a star with an OK in the middle.

The OK AWARD is an award that is given at the end of each foods laboratory. It should be given to the group of students who scored the highest or performed the best in the kitchen according to a specific set of criteria that the teacher has established.

Keep a record of the group that wins the award each week. At the end of the semester, give some type of special award to the group that has received the award the most number of times.

The OK AWARD is an excellent motivational aid for any foods laboratory.



BULLETIN BOARD IDEA: You can take a picture of the group that wins the award each week. This is one way of keeping a record of who has won the award throughout the semester. The students also enjoy seeing their pictures on the bulletin board.

FIND A JOB IN FOOD SERVICE

DIRECTIONS: Find the names of food-service jobs listed below in this word-search game. Names of jobs may be spelled vertically or horizontally. Circle each name located.

WORDS TO LOCATE:

- food-services manager
- chef
- second cook
- fry cook
- grillman
- vegetable cook
- cook's helper
- salad maker
- sandwich maker
- baker
- baker's helper
- dishwasher
- potwasher
- purchasing agent
- host
- hostess
- waiter
- waitress
- bus boy
- bus girl
- cashier
- dietitian

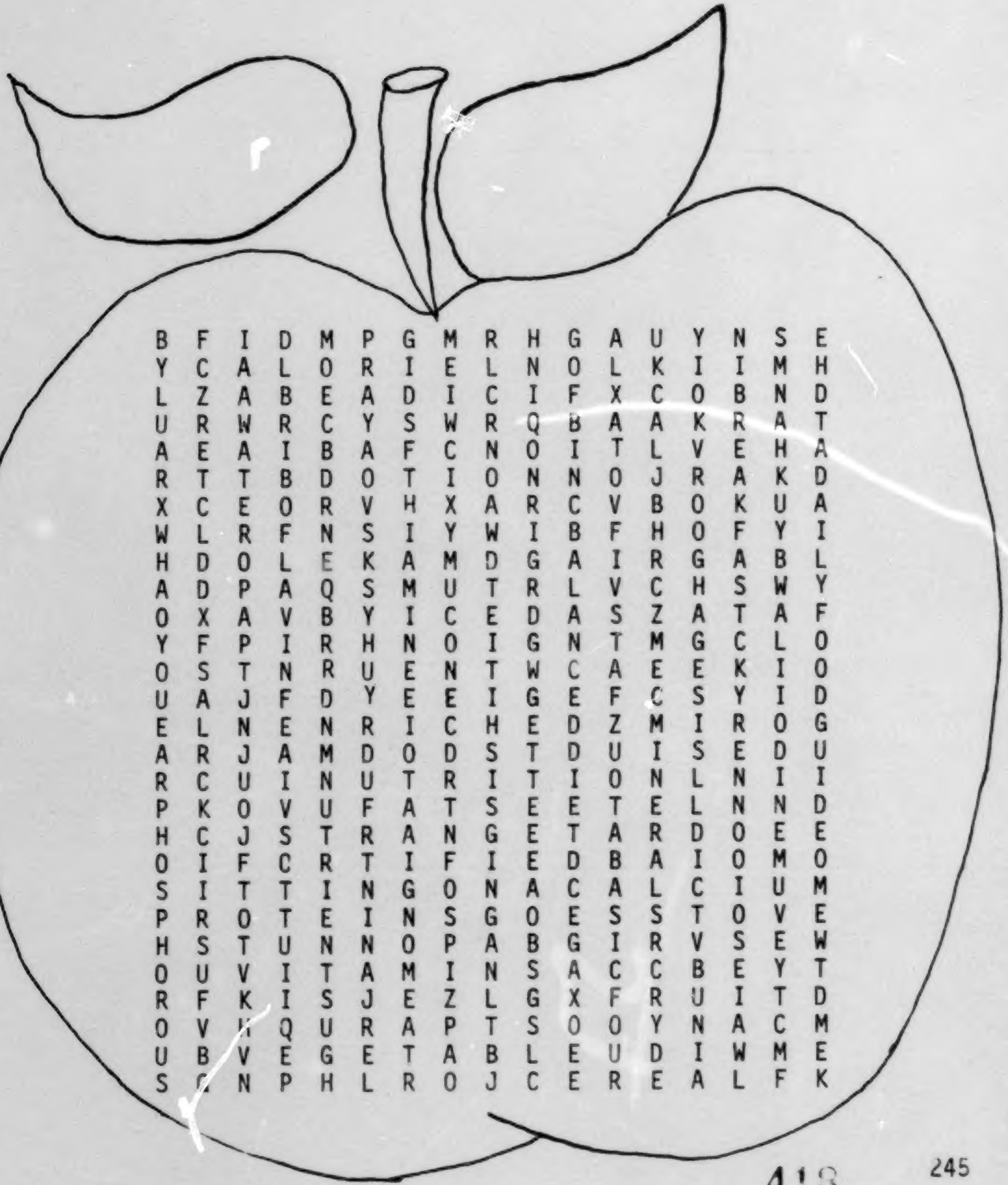
Food Service. Coordinated Vocabulary Academic Education, Texas State Educational Agency, Texas Tech

F	O	O	D	S	E	R	V	I	C	E	S	M	A	N	A	G	E	R
A	Z	T	I	U	M	R	O	C	H	O	S	T	E	S	S	T	V	N
B	W	V	S	T	O	C	E	T	E	B	S	M	R	K	N	P	E	U
A	A	N	H	L	I	Q	Z	X	F	R	Y	C	O	O	K	U	G	P
K	I	Q	W	A	I	T	E	R	T	X	Z	O	I	T	U	R	E	U
E	T	S	A	N	D	W	I	C	H	M	A	K	E	R	Z	C	T	O
R	R	T	S	E	C	O	N	D	C	O	O	K	T	U	N	H	A	K
S	E	U	H	O	S	T	Z	G	O	B	U	S	B	O	Y	A	B	U
H	S	O	E	A	G	D	C	R	U	A	H	T	U	N	P	S	L	O
E	S	P	R	H	B	F	I	I	T	K	L	K	S	M	O	I	E	K
L	C	O	O	K	S	H	E	L	P	E	R	N	G	Q	T	N	C	A
P	A	K	E	R	S	E	J	L	U	R	T	R	I	S	W	G	O	S
E	S	T	D	E	A	Z	Y	M	Q	U	X	C	R	D	A	A	O	O
R	H	E	C	G	F	B	C	A	A	F	I	V	L	U	S	G	K	U
D	I	E	T	I	T	I	A	N	G	B	H	E	V	W	H	E	Z	S
V	E	B	H	E	S	D	S	E	R	T	O	C	O	K	E	N	U	B
R	R	O	S	A	L	A	D	M	A	K	E	R	A	T	R	T	R	S

NUTRITION SCRAMBLE

Each of the words in this list is hidden in the maze puzzle. Words can be found in any of these three ways: across (⟶), down (↓), and at an angle (⤢). Circle each word as you find it.

Ascorbic Acid
Balanced Diet
Bread
Breakfast
Calcium
Calorie
Carbohydrate
Cereal
Daily Food Guide
Dairy
Diet
Enriched
Fats
Fortified
Fruit
Iodine
Iron
Meat
Minerals
Niacin
Nutrients
Nutrition
Phosphorous
Protein
Riboflavin
Thiamine
Vitamin
Vegetable
Water



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B F I D M P G M R H G A U Y N S E
Y C A L O R I E L N O L K I I M H
L Z A B E A D I C I F X C O B N D
U R W R C Y S W R Q B A A K R A T
A E A I B A F C N O I T L V E H A
R T T B D O T I O N N O J R A K D
X C E O R V H X A R C V B O K U A
W L R F N S I Y W I B F H O F Y I
H D O L E K A M D G A I R G A B L
A D P A Q S M U T R L V C H S W Y
O X A V B Y I C E D A S Z A T A F
Y F P I R H N O I G N T M G C L O
O S T N R U E N T W C A E E K I O
U A J F D Y E E I G E F C S Y I D
E L N E N R I C H E D Z M I R O G
A R J A M D O D S T D U I S E D U
R C U I N U T R I T I O N L N I I
P K O V U F A T S E E T E L N N D
H C J S T R A N G E T A R D O E E
O I F C R T I F I E D B A I O M O
S I T T I N G O N A C A L C I U M
P R O T E I N S G O E S S T O V E
H S T U N N O P A B G I R V S E W
O U V I T A M I N S A C C B E Y T
R F K I S J E Z L G X F R U I T D
O V H Q U R A P T S O O Y N A C M
U B V E G E T A B L E U D I W M E
S G N P H L R O J C E R E A L F K
```

FOOD GROUP BINGO

1. You will fill in your own bingo card, writing the name of a food in each square. Each row across is for one food group. You will need to think of four foods in each group. For instance, write only foods that are fruits or vegetables in the top row.
2. Use specific foods, such as: chocolate milk, rye bread, corn flakes.
3. After all have finished writing, start with one person who reads the food from one of his squares. He then makes an X over it. Anyone who has the same food also crosses it out on his card.
4. Each person takes a turn calling a food. When someone has four in a row, he calls "BINGO." That person wins.
5. Another way is to continue calling and marking until one person has all foods crossed out.

Fruits and Vegetables				
Breads and Cereals				
Milk Products				
Meats				
Fats, Sweets & Alcohol				

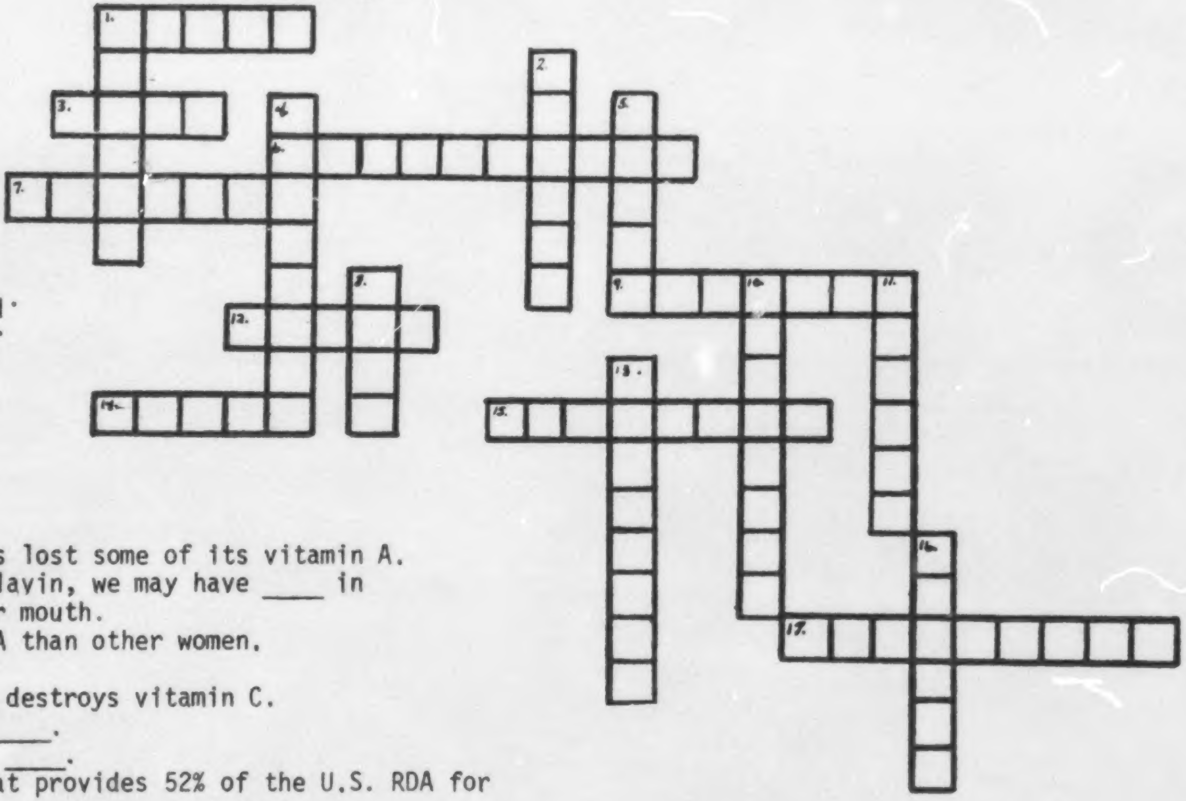
METRIC DUMMY DIRECTIONS

The game is played the same way that Old Maid is played with 2, 3 or 4 players. Each is dealt five cards and in turn draws one card from the stack. The player then tries to match the drawn card with the cards in hand and then discards one. Instead of matching duplicate cards, however, the players match the correct answer card to the question card. The game continues until all cards have been matched in correct pairs and one player is left with the metric dummy card. The game further requires a referee who holds a master list that shows the correct pairing of cards. The last player out is "Metric Dummy." Use 3 x 5 cards. Prepare 43 cards (21 ask questions and 21 give the correct answers and the odd card is the metric dummy.)

The two sets read as follows:

	QUESTION CARDS	ANSWER CARDS
1.	A GRAM is a measure of	Weight
2.	A LITER is a measure	Liquid volume
3.	A METER is a measure of	Length
4.	A CENTIMETER equals	1/100 of a meter
5.	A DECILITER equals	1/10 of a liter
6.	A GRAM equals	1/454 of a pound
7.	A KILOGRAM equals	1000 grams
8.	A KILOGRAM equals	2.2 pounds
9.	A LITER equals	1.06 quarts
10.	A METER equals	39.37 inches
11.	One POUND equals	454 grams
12.	Two POUNDS and Three OUNCES equal	One kilogram
13.	In the word centigram, the prefix CENTI means	1/100 of a gram
14.	In the word decimeter, the prefix DECI means	1/10 of a meter
15.	In the word kiloliter, the prefix KILO means	1000 times a liter
16.	One INCH equals	2.54 centimeters
17.	One FOOT equals	0.3 meters
18.	One YARD equals	0.91 meters
19.	One CUP (8 ounces) equals	0.24 liters
20.	One PINT (16 ounces) equals	0.47 liters
21.	One QUART (32 ounces) equals	0.95 liters
22.	Odd card	METRIC DUMMY

VITAMIN CROSSWORD PUZZLE
by
Debbie Lynn



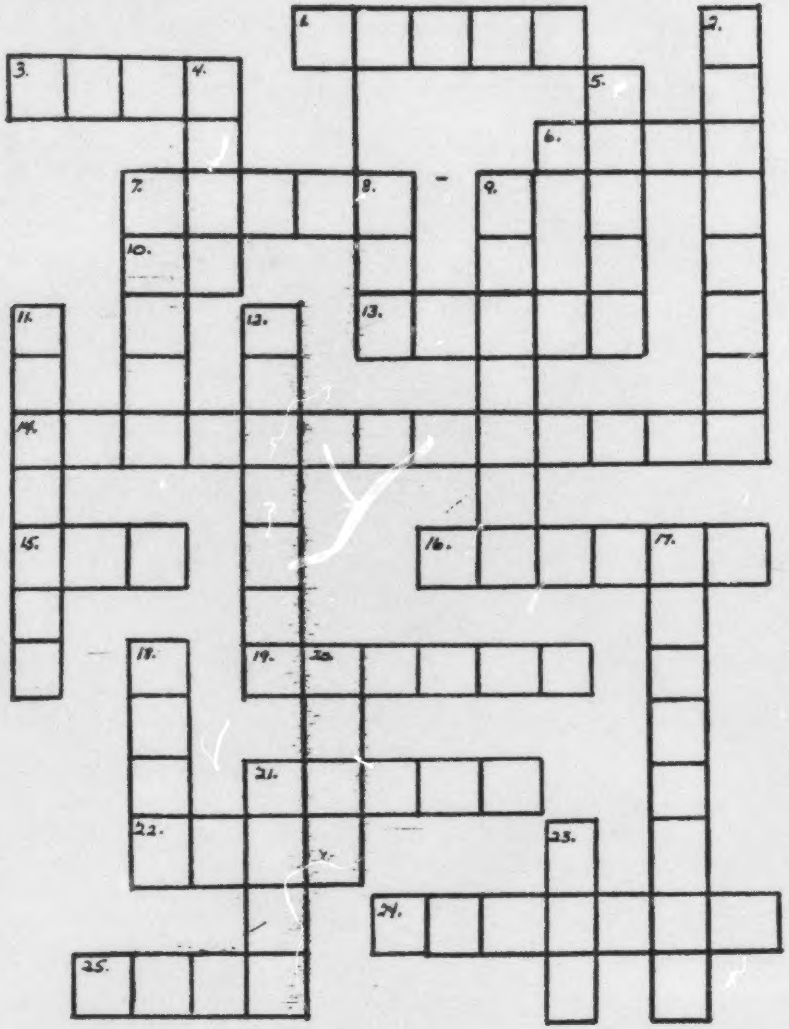
ACROSS

1. Scientists tell us a ____ needs 13 mg. of niacin.
3. Vitamin C acts like ____.
6. Another name for vitamin B_2 is ____.
7. We may become ____ if we do not have enough vitamin A. This means that we would not be able to have babies.
9. ____ is also called vitamin B_1.
12. Vitamin C is dissolved in ___.
14. We need niacin to have a healthy digestive ____.
15. People who need more ____ also need more thiamin.
17. Most ____ need more niacin than adults.

DOWN

1. If a vegetable is ____, it has lost some of its vitamin A.
2. If we do not get enough riboflavin, we may have ____ in the skin at the corners of our mouth.
4. ____ women need more vitamin A than other women.
5. ____ destroys riboflavin.
8. ____, in the presence of air, destroys vitamin C.
10. Thiamin helps us have a good ____.
11. Thiamin helps us have healthy ____.
13. One (2 words) with lean and fat provides 52% of the U.S. RDA for thiamin.
16. Niacin helps us have a healthy covering on our ____.

KEY: Across 1. woman 3. glue 6. riboflavin 7. sterile 9. thiamin 12. water 14. tract 15. calories 17. teenagers.
Down 1. wilted 2. cracks 4. pregnant, 5. light 8. heat 10. appetite 11. nerves 13. porkchops 16. tongue.



CROSSWORD PUZZLE by Chris Weems
Nutrients, Functions, and Sources

DOWN

1. A good source of protein and niacin.
2. Calcium is one.
4. Vitamin A helps the condition of the ____.
5. Cereal product.
7. An excellent source of iron, vitamin A and the B complex.
8. Opposite of no.
9. Unit used to measure food energy value.
11. A vitamin D deficiency disease in infants.
12. Helps build all parts of body.
17. ____acid is vitamin C.
18. Nutrients that supply energy and transport some nutrients.
20. Mineral important to prevent anemia.
21. A cereal grain grown in Arkansas.
23. To consume food.

ACROSS

1. Straw ____ is a good source of vitamin C.
3. Dessert high in calories.
6. Nutrient to prevent anemia.
7. ____ vegetables are good sources of iron.
10. To be.
13. ____dressings are good sources of fats.
14. Nutrients for energy.
15. A good source of iron and thiamin.
16. A good source of carbohydrates and niacin.
19. One of vitamin B complex.
21. A way of preparing meat; to ____.
22. Vitamin A helps keep the ____ healthy.
24. One of the vitamin B complex.
25. A citrus fruit that supplies vitamin C.

KEY: Across 1. Berry 3. Cake 6. Iron 7. Leafy 10. Is 13. Salad 14. Carbohydrates 15. Egg 16. Cereal 19. Niacin 21. Roast 22. Skin 24. Thiamin 25. Lime. Down 1. Beef 2. Mineral 4. Eyes 5. Bread 7. Liver 8. Yes 9. Calorie 11. Rickets 12. Protein 17. Ascorbic 18. Fats 20. Iron 21. Rice, 23. Eat.

CROSSWORD PUZZLE by Linda King
The Nutrients and their Functions

ACROSS

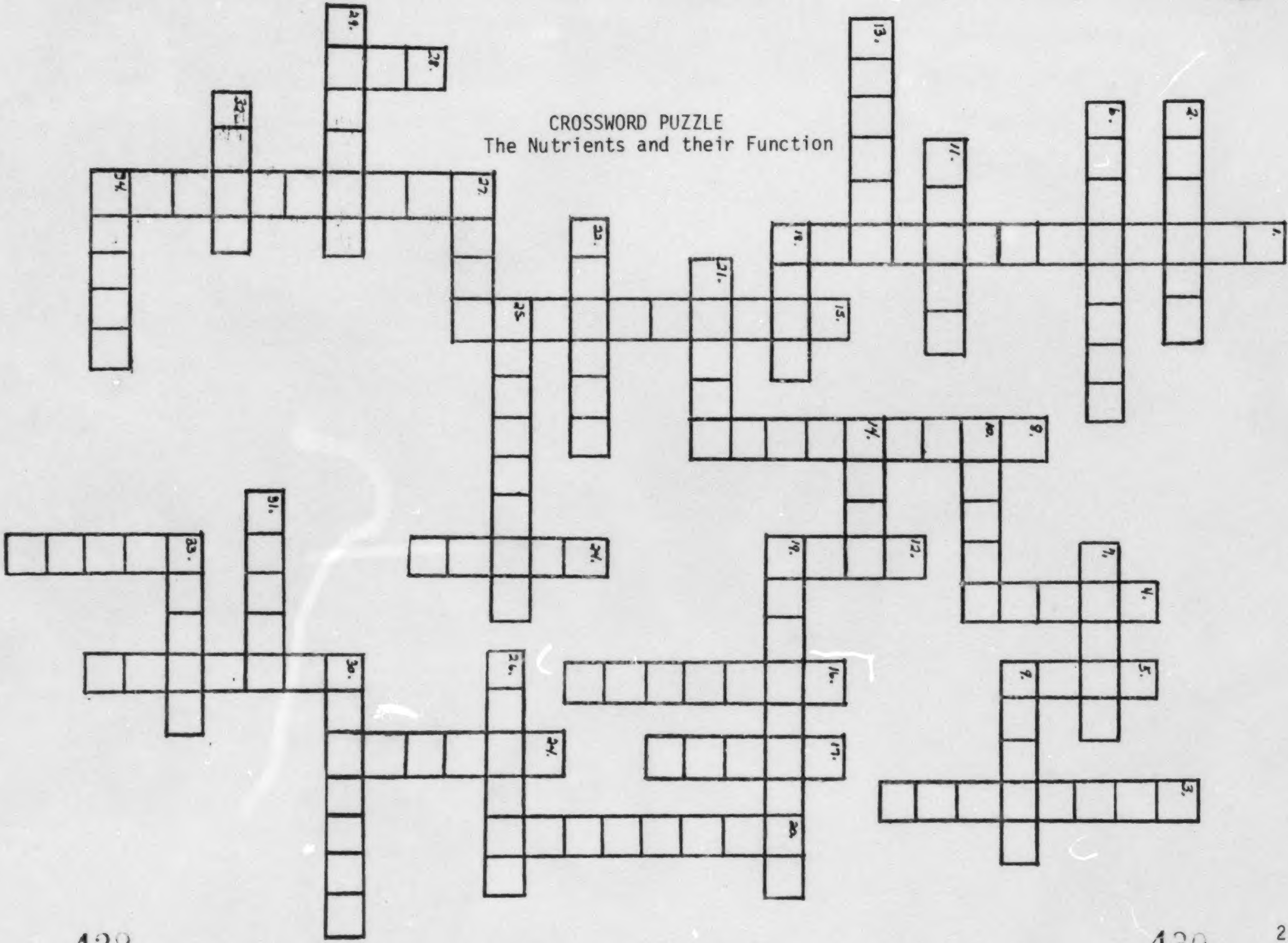
2. A primary function of carbohydrates and fats is to give our bodies ____.
6. The energy that we get from carbohydrates, fats, and protein is measured in units called ____.
7. A primary function of protein is to build and repair ____.
9. Vitamin C helps prevent our ____ from falling out.
10. If we do not get enough riboflavin, our eyes may become extra sensitive to ____.
11. Vitamin C helps wounds and ____ heal.
13. If a person eats more calories than he/she needs for energy, he/she will gain ____.
14. Vitamin A helps us see in ____ places.
18. Vitamin A also helps us have healthy ____.
19. We get ____ from the foods we eat to nourish our bodies.
21. Nutrients come from the ____ that we eat.
22. One of the B vitamins is called ____.
25. Fat helps to ____ our bodies. Fat helps to keep the body at the right temperature, not too hot nor too cold.
26. Thiamine helps keep our ____ healthy.
27. The blood needs ____ to help it carry oxygen to all parts of the body.
29. If we do not get enough energy from the foods we eat, we will use fat that the body has ____.
30. Calcium helps our ____ work properly.
31. Calcium helps our bodies build strong _____ and teeth.
32. Protein helps us have healthy skin and ____.
33. Protein helps us ____ all the parts of our bodies. This is why it is so important for children and pregnant women to get enough protein.
34. If we do not eat enough foods with fat, our skin may become rough and ____.

DOWN

1. Sugar and starch foods are called ____.
3. Thiamine helps us to have a good ____.
4. Calcium helps our muscles to work, and one of these muscles is our ____.
5. Calcium helps the blood to ____.
8. Vitamin A helps prevent ____.
12. Riboflavin helps us have healthy ____.
15. Another name for B_2 is ____.
16. Riboflavin helps our bodies use carbohydrate, fat, and ____.
17. Vitamin C helps keep ____ from getting into our bodies.
20. Another name for vitamin B_1 is ____.
23. A nutrient that makes up 55 to 70% of our total body weight is ____.
24. If we do not get enough riboflavin in our diets. we may get ___ at the corners of our mouths.
27. Protein helps our bodies stay well. It helps us fight ____.
28. ____ is a concentrated source of energy.
30. Vitamin C helps us have firm ____.
33. Most of the iron in our bodies is in our ____.

KEY: ACROSS 2. Energy 6. Calories 7. Cells 9. Teeth
10. Light 11. Burns 13. Weight 14. Dark 18. Skin
19. Nutrients 21. Foods 22. Niacin 25. Insulate
26. Nerves 27. Iron 29. Stored 30. Muscles 31. Bones
32. Hair 33. Build 34. Scaly DOWN 1. Carbohydrates
3. Appetite 4. Heart 5. Clot 8. Blindness 12. Skin
15. Riboflavin 16. Protein 17. Germs 20. Thiamine
23. Water 24 Cracks 27. Infections 28. Fat 30. Muscles
33. Blood

CROSSWORD PUZZLE
The Nutrients and their Function


29.
28.
32.
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DISPLAY BOARD IDEAS

1. Breakfast Is No Rope, So Don't Skip It.
(use jump rope.)

2. Branch Out Through Home Economics.
(use branch and leaves.)

3. Kitchen Foot Savers
(work centers.)

4. Pack a Lunch That Packs a Punch.
(use boxing glove.)

5. Love At First Bite.
(vampire, bats, hearts, desserts.)

6. Tips on Tables for Two.
(pictures of settings.)

7. Economical Ideas.
(booklets on topics discussed.)

8. The Cards Are Stacked In Your Favor.
(each card has food group or nutrients.)

9. Don't Say Pooh To Good Nutrition.
(use Winnie the Pooh.)

10. Don't Goof Up, Read Your Recipe Several Times.
(use goofie.)

11. Bee Wise.
(use bees.)

12. Dial "N" for Nutrition.
(use a telephone with nutrients in the holes.)

13. Food Label Search.
(use different labels.)

14. Don't Get Hung Up On.........
(use a real clothes line.)

15. Fishing For Good Nutrition.
(cane pole, line, hook, nutrients on fish.)

16. Balance Your Calories.
(use a balance scale or seal with ball.)

17. In Which Country Would You Like to Eat?
(pictures of foods from different countries.)

18. Energy Savers.
(use piggy bank and pamphlets.)

19. Good Nutrition is the Key to Your Healtn.
(use a key.)

20. Target.
(whatever topic you choose, use a target.)

21 Chew On This.
(table setting.)

22. This Will Jog You.
(pair of tennis shoes.)

23. Don't Let Nutrition Bug You.
(lady bug.)

24. Don't Bury Your Head---Learn The Metrics.
(use ostrich.)

25. Wishing For New Energy Sources.
(wishing well.)

26. Extra! Extra! Kitchen Safety Ideas.
(cover background with newspaper.)

27. Don't Be a Stinker. Learn The Metrics.
(skunk.)

28. Feel Caged In---Escape With Good Eating Habits.
(cage with a monkey.)

29. Bubbling With Breakfast.
(a child blowing bubbles.)

30. The Career Food Wheel Has Many Spokes.
(wagon wheel listing careers on spokes.)

31. Building Blocks for Nutrition.
(arrange blocks with nutrients.)

32. Diets Can Be Poisonous.
(Halloween Masks.)

33. Foods Can Be Poisonous.
(use skull and cross bones.)

34. "What's Brewing In Home Economics?"
(witch with pot over fire, label bubbles.)

35. The Vitamin Superstars.
(put vitamins in a star and foods in points.)

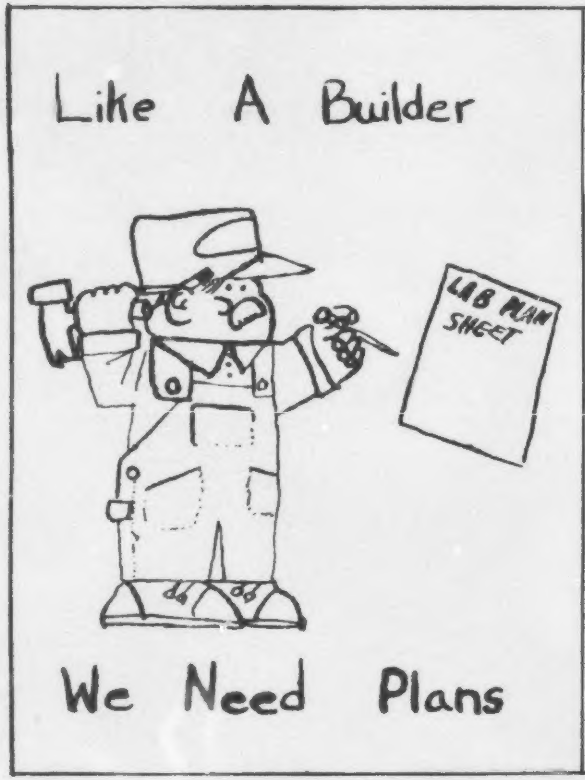
36. An Armful of Careers in Food Service.
(octopus.)

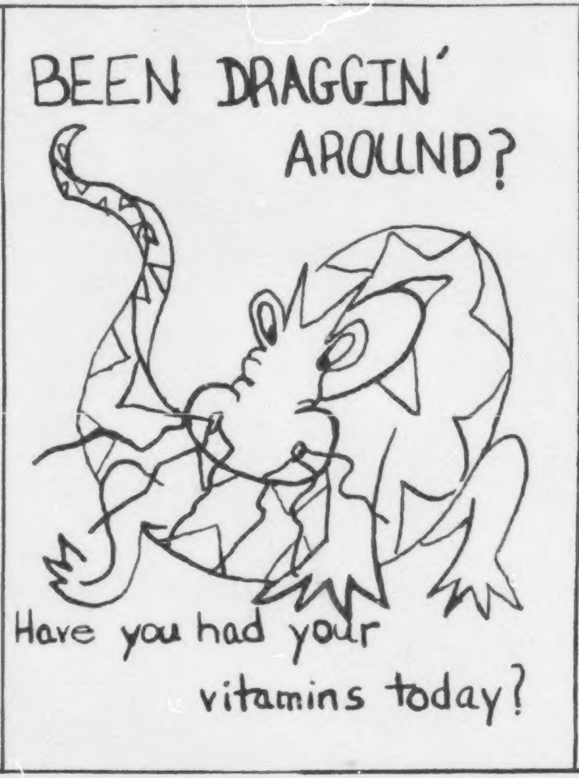
37. Get On the Right Snack Track.
(train tracks.)

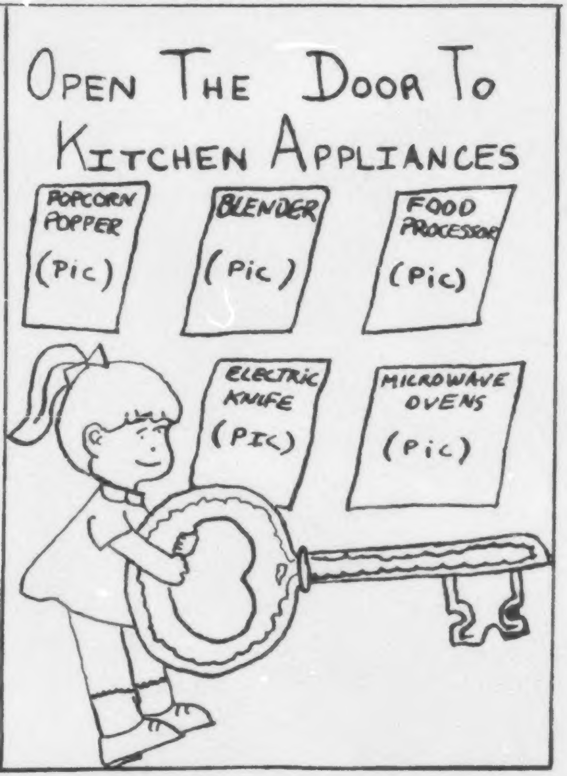
38. Getting Your Money's Worth--- Compare Prices,
Brands, Features.

39. Good Food For Good Health.
(use basic five.)

40. A Wise Consumer Is One Who-o-o-o.
(owl on tree limb with concepts on limbs.)


Like A Builder
LAB PLAN SHEET
We Need Plans

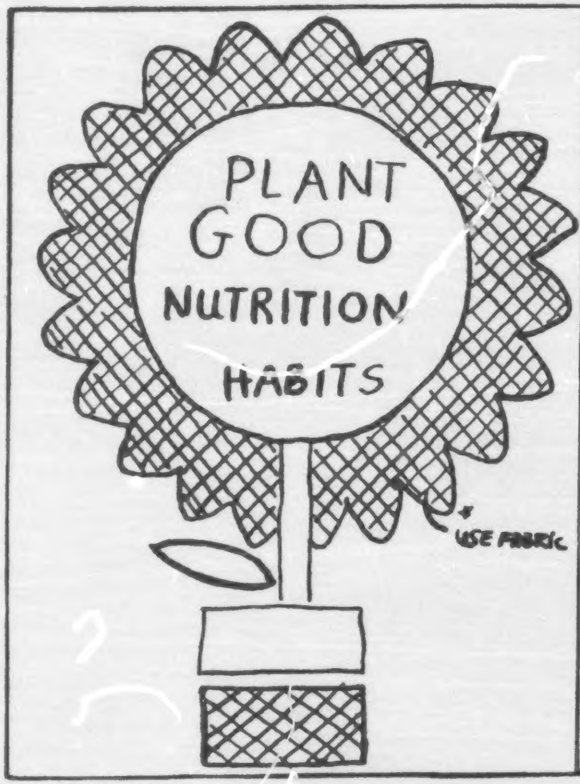

BEEN DRAGGIN' AROUND?
Have you had your vitamins today?

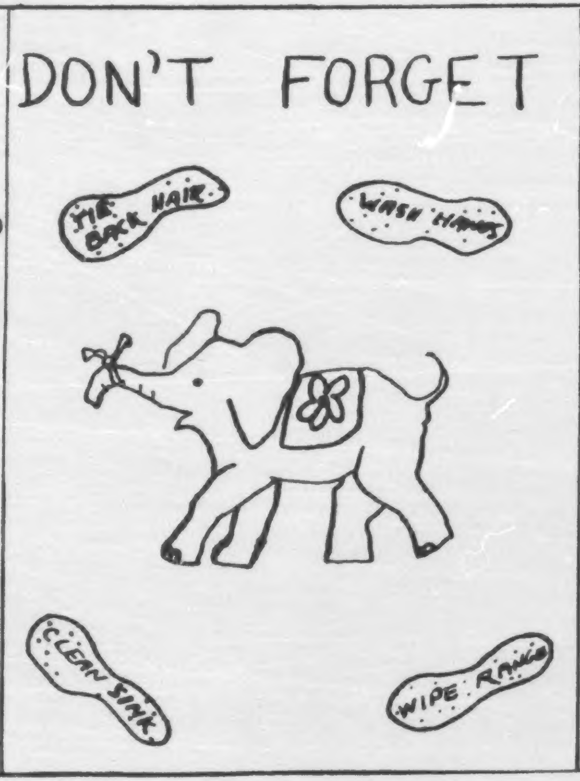

OPEN THE DOOR TO KITCHEN APPLIANCES
POPCORN POPPER
(Pic)
BLENDER
(Pic)
FOOD PROCESSOR
(Pic)
ELECTRIC KNIFE
(PIC)
MICROWAVE OVENS
(Pic)

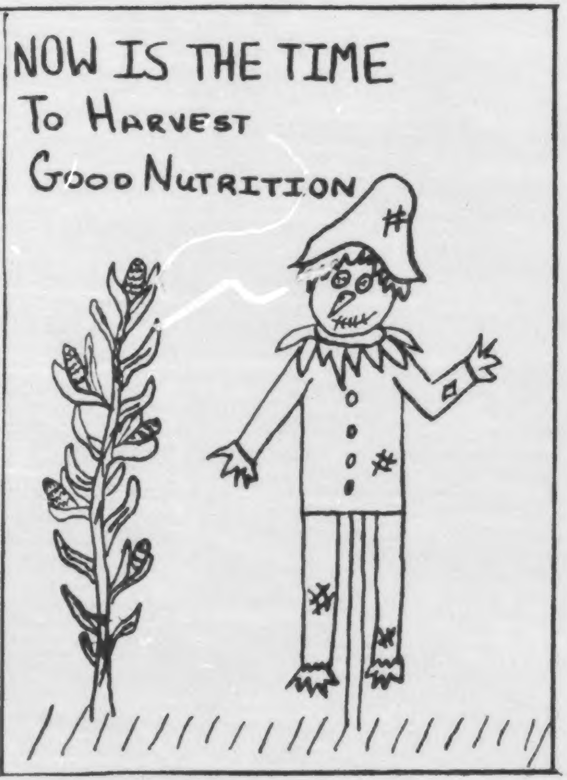
You can use unit plans, foods
lab sheets, etc.

Have students find pictures
and important facts about
the new appliances.

* Bulletin Board characters are taken from Adapt-A-Board Book, Helpful Characters, Trend Enterprises, Inc.
P.O. Box 3073, St. Paul, Minnesota 55165


PLANT
GOOD
NUTRITION
HABITS
USE FABRIC

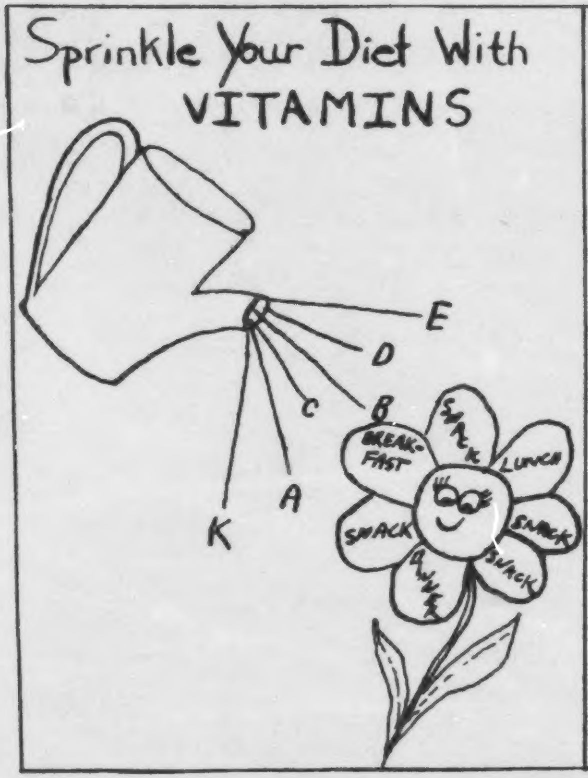

DON'T FORGET
TIE BACK HAIR
WASH HANDS
CLEAN SINK
WIPE RANGE

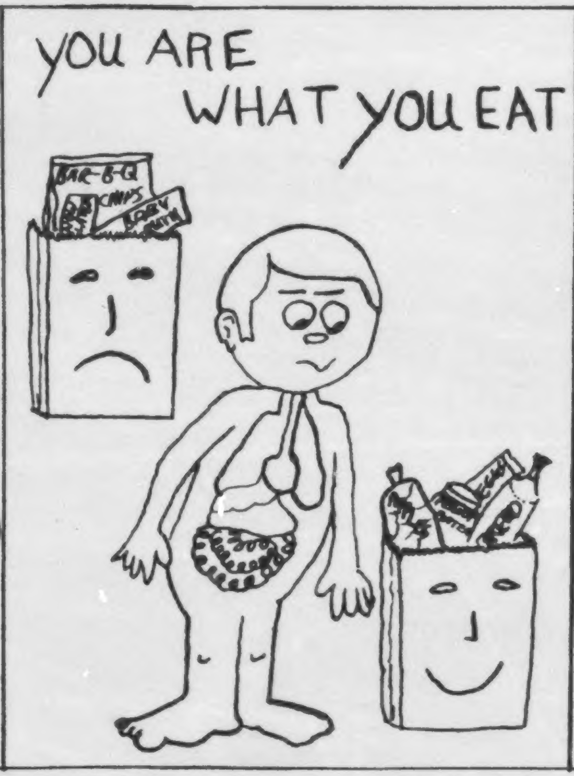

NOW IS THE TIME
To Harvest
Good Nutrition

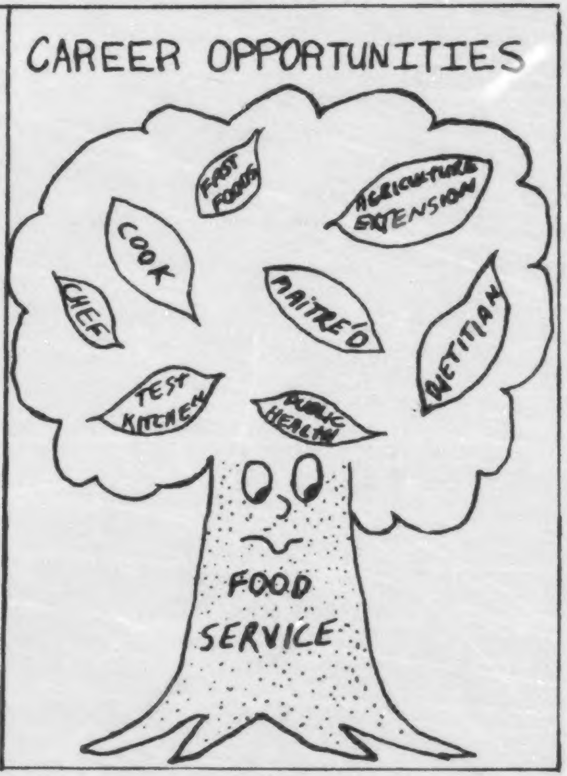
Use fabric for the flower pot, leaf, and petals.

Kitchen lab hints are written on peanut-shaped construction paper.

Buttons for eyes, red gingham material for shirt, denim pants, stick for pole, dried corn cobs cut in half, or glue popcorn on cardboard, assorted patches. straw hair, hands, and feet. Felt hat. Leaves for the idea of Fall. Ice cream cone nose.


Sprinkle Your Diet With VITAMINS
E
D
C
B
A
K
BREAK-FAST
SNACK
LUNCH
SNACK
SNACK
SNACK
DINNER


YOU ARE WHAT YOU EAT
BAR-B-Q CHIPS


CAREER OPPORTUNITIES
FAST FOODS
AGRICULTURE EXTENSION
COOK
CHEF
MAITRE'D
DIETITIAN
TEST KITCHEN
PUBLIC HEALTH
FOOD SERVICE

Use medium paper bags.
Stuff bottoms with paper.
Use empty containers.

*Bulletin Board characters are taken from Adapt-A-Board Book, Natural Science Characters, Trend Enterprises, Inc. P.O. Box 3073, St. Paul, Minnesota 55165

APPENDIX C

LABORATORY SUGGESTIONS

RULES FOR FOODS LABORATORY

"QUOTES TO REMEMBER"

1. Wear a clean apron.
"Spots on a cook
are like blots on a book."

2. Know your schedule.
"Knowing what to do
Makes you first to get through."

3. Get out all basic pieces of equipment before your start.
" Work proceeds faster
Since you are its master."

4. Make only one trip to get perishable supplies.
"The price of forgetting
Is paid much in fretting."

5. Talk only when necessary.
"Cooks who chatter
Spoil the batter."

6. Keep the working space clean.
"Having a cleaning cloth handy
Helps keep things spick and spandy."

7. Keep your head, don't run, walk.
"The one who scurries
Causes more worries."

8. Work quietly.
"A wooden spoon
Beats a softer tune."

9. Rinse and stack used equipment as you work.
"Put stubborn pans to soak
Means less work later."

10. Always use equipment the safest way.
"Pot holders came as a useful
Invention to keep dish towels
clean and aid in fire prevention."

11. Wooden spoons help to keep fingers from burning.
"Other tips on precaution are
Well worth your learning."

12. Assume responsibility.
"The person who does more than he has to is
the one the favors are returned to."

LAB PLAN

TABLE SERVICE ____________
LINENS ____________
MEAL PATTERN ____________

COVER

OBJECTIVE:

MENU:

WHO	WHAT	EQUIPMENT	FOOD SUPPLIES
Cook	-Responsible for cooking. Clears and cleans dining table. Sweeps floor. Empties garbage. Mops the floor.		
Asst. Cook	-Helps with cooking. Cleans stove. Stacks dishes for washing. Puts away dishes. Check cabinets and drawers.		
Helper I	-Leader of the group. Serves the Food. Helps get supplies at the supply table. Washes dishes. Takes place of absentee. Wipes cabinets. Cleans sink.		
Helper II	-Sets the table. Dries the dishes. Makes the beverage or water. Takes care of dish towels. Prepares centerpiece.		

POST CLASS REACTION SHEET

NAME________________________

DATE________________________

1. How do you feel about this week's work?

____ very dissatisfied
____ somewhat dissatisfied
____ so-so
____ satisfied
____ very satisfied

2. Why?

3. From your point of view, how could you improve next week?

4. How could we as a class improve?

5. What have you learned this week?

6. If you haven't learned and enjoyed, why?

7. Comments...........

* This evaluation sheet was used in the foods unit for the students to evaluate their meals, but it could be used for many other projects.

APPENDIX D

EVALUATION AS A MEASURE OF ACCOUNTABILITY

EVALUATION AS A MEASURE OF ACCOUNTABILITY

Evaluation is a process which every teacher uses daily and in the course of a day a number of different instruments, devices or techniques have been used in order that more objective and meaningful appraisals can be made. To determine what progress has been made, one form of test should be given at the beginning of a unit of work and another form similar to the first given at the end of the unit. The difference in the scores can be used to measure student progress and teaching effectiveness.

Evaluation should never be considered as a process complete within itself, but a necessary process of every educational program. Among reasons most frequently given for evaluation are the following:

1. Determine needs of students to use in formulating objectives.
2. Assist in grouping or placement of students.
3. Discuss weaknesses and strengths of students in order to be more helpful.
4. Secure evidence of the progress which is being made by students.
5. Serve as learning experience for developing certain types of behavior of the students.
6. Secure evidence which will serve as a check on the effectiveness of a given program.
7. Provide psychological security for the teacher.
8. Secure the support of the community.
9. Provide a basis for reporting or recording progress.

The effectiveness of a home economics program is determined by the quality of product which results. This product is the accomplishment of students. The progress made by students is the best evidence to examine the effectiveness of an instructional program. Instead of trying to explain the weaknesses and strengths revealed in terms of student behavior, it should be in terms of methods used, equipment provided, subject matter included, and other similar factors that make up the educational process.

SELECTED TEST ITEMS
FOR
CORE MATERIALS

Directions for Use: Several types of test items are included under each topic of the Conceptual Outline of Core Materials. These teacher-made items were developed to be used for pre and post testing of concepts or to provide quiz items for daily evaluation of students. Caution must be taken in selecting items for an appropriate difficulty level that measures student progress toward attainment of specific behavioral objectives.

I. NUTRITION

A. FOOD FACTS AND FUNCTIONS

TRUE - FALSE

T 1. Learning is difficult when one is hungry.
F 2. The amount and kinds of nutrients that are needed by the body will remain the same throughout one's life.
F 3. Food is important to the body for relief of hunger pangs, but serves no other role in the body.
T 4. The food we eat is of importance now and it will also influence future health.
T 5. Everyone is on a diet.
T 6. The vitamin B complex group helps our digestive and nervous systems to function properly.
T 7. A calorie is a unit used to express the energy value of foods.
F 8. Teenagers require fewer calories per day than 6 year olds.

MULTIPLE CHOICE

B 1. High quality (complete) protein is found in (a) vegetables (b) meat and milk (c) bread and cereals (d) fruits.
A 2. A person who performs physical labor would need more than the average amount of (a) carbohydrates (b) protein (c) minerals (d) vitamins.
D 3. One's height is affected by (a) rate of maturation (b) diet (c) heredity (d) all of these.

A 4. Which nutrient is supplied by a serving of dark green, leafy vegetables every other day? (a) vitamin A (b) vitamin D (c) vitamin C (d) vitamin B.

B 5. Which food is not a rich source of vitamn C? (a) oranges (b) apples (c) tomatoes (d) grapefruit.

D 6. Another name for the sunshine vitamin is (a) vitamin A (b) vitamin B (c) vitamin C (d) vitamin D.

C 7. The most common type of anemia is caused by the shortage of the mineral (a) calcium (b) iodine (c) iron (d) copper.

COMPLETION

1. Iron is predominately found in the red blood cells of the body.
2. The process of breaking down foods into nutrients within the body is called digestion.
3. Young women need more iron than young men.
4. Grains and cereals made from grain are a main source of carbohydrates.
5. The nutrient which provides the most energy per gram is fat.
6. The building blocks of proteins are called amino acids.
7. Three nutrients which provide energy are carbohydrates, proteins, and fats.
8. RDA stands for Recommended Dietary Allowance.

SELECT ANSWER FROM THE FOLLOWING: (a) carbohydrates (b) fats (c) minerals (d) proteins (e) vitamins.

A 1. Give energy and help other nutrients work to best advantage.
B 2. Give more food energy than other nutrients, weight for weight.
D 3. Help in building the body and in keeping it in good repair.
D 4. Needed in building and repairing each tissue of the body.
A 5. Cellulose is a part of this nutrient group.
D 6. This nutrient is made of amino acids and is complete or incomplete.
C 7. Most important ones for body are calcium, phosphorous, iodine, and iron.
B 8. Cushions body organs, serves as insulation, and conserves body warmth.
A 9. Sucrose, lactose, glucose, fructose, maltose, are classified in this group.

MATCHING

C 1. Helps eyesight
B 2. Builds bones and teeth
D 3. Helps prevent goiter
E 4. Makes up 70% of body
A 5. Holds body cells together

a. vitamin C
b. Calcium
c. vitamin A
d. Iodine
e. Water
f. Iron

LISTING

Each day people must decide what to eat. To provide adequate nutrition, all foods have been divided into five groups known as the USDA Daily Food Guide. Give the following information: 1. the name of the five groups 2. three examples of foods in that group 3. number of servings that should be eaten daily.

B. CURRENT ISSUES AND CONCERNS

TRUE - FALSE

F 1. Fad dieting is especially effective for obese people since it takes pounds off quickly and permanently.
T 2. Alcohol hinders the body's use of nutrients.
T 3. Too much of some nutrients can be as bad for the body as too little.
F 4. A fat person is always well-fed.
T 5. People may overeat because they are lonely, bored, tense, or just want to be sociable.
F 6. People's eating habits usually change rapidly.
T 7. Restaurants use portion control in serving food to their customers.
T 8. People who skip breakfast often have problems concentrating on school work or their jobs.
T 9. Cereal products that have vitamins and minerals added to them are labeled "enriched."
T 10. Nutritious snacks should be included as part of your daily food pattern.
T 11. As countries become affluent, they tend to select more expensive foods to eat.
T 12. Only a small part of land on Earth --approximately 11 percent-- is suitable for growing crops.
T 13. Food designed for astronauts in space has resulted in new discoveries in freeze-dried foods.

MULTIPLE CHOICE

C 1. A snack should be eaten (a) soon after breakfast (b) right before lunch (c) about halfway between two meals (d) anytime you want one.
C 2. Food fads most often are based on (a) Basic Five Foods (b) the nutrients (c) misinformation.
D 3. Health is influenced by (a) heredity (b) life style (c) food eaten (d) all of these.

IDENTIFYING

Below is a list of situations that can influence a person's attitude toward food. If this situation is likely to have a negative or bad influence on attitude toward food, mark with an N. If the situation is likely to have a positive influence on attitude toward food, mark with a P.

N 1. A family argument during dinner.
P 2. Background music during meals.
N 3. Worrying about an up-coming exam during lunch.
N 4. Long lunch lines.
P 5. Relaxation time before dinner.
N 6. A person feeling unwanted and left out by friends.

C. SPECIAL DIETARY NEEDS

TRUE - FALSE

F 1. The stomach tends to shrink when weight is lost.
F 2. Limiting yourself to two meals a day is a smart way to lose weight.
T 3. It is recommended that one not lose more than one and one-half to two pounds a week.
T 4. The more overweight a person is, the greater the danger to health and life expectancy.
T 5. People tend to eat less when they eat food more slowly.
F 6. An overweight person should eliminate all fat from the diet.
T 7. A pregnant woman needs more of most nutrients than she did before she was pregnant.
F 8. Vitamin pills cannot hurt you.
T 9. Mental retardation in a child can be caused by a very poor diet for the mother during pregnancy.
T 10. When a person is ill or convalescing, frequent small meals can help to stimulate the appetite.
F 11. Infants should be given sugar water to improve their appetite.
T 12. The adult is responsible for selecting the right kind of food for children but children can usually judge for themselves how much they can eat.

DISCUSSION

1. Choose one of the following groups of people and analyze this group's food requirements. (a) pregnant women (b) overweight people (c) underweight people (d) senior citizens (e) manual laborers (f) athletes. Develop a three day menu. Have the class or committee evaluate each menu plan for good nutrition.
2. Many popular "crash" diets are advertised for quick weight loss. Find information and report on the pitfalls and dangers of three fad diets.

II. CONSUMER PRACTICES

A. GOVERNMENT AGENCIES, LAWS AND ASSISTANCE PROGRAMS

TRUE - FALSE

T 1. No food can be placed on the grocer's shelf unless it has met U.S. Food and Drug Administration labeling requirements.
T 2. Federal law requires that all meat labels indicate the wholesale cut on the label.
F 3. A government agency is located in each city.
T 4. All colors added to food must be within the limits established by the FDA.
T 5. The first "pure food" law was passed in 1906.
T 6. A food that is unsafe or injurious to health is considered illegal and prohibited in interstate commerce.
T 7. Most food laws pertain to meat, poultry, poultry products, and canned food.
F 8. Chemical preservatives that are used in canned foods are not indicated on the label.
T 9. All information listed on labels must be accuracte.
F 10. The Food and Drug Administration is part of the Home Economics Department.
T 11. The elderly often do not know about federal assistance programs.
F 12. The best time to buy groceries is when you are hungry.

SELECT ANSWER FROM THE FOLLOWING: (a) FDA (b) USDA (c) FTC

A 1. Makes sure that the ads about food and medicine are accurate.
A 2. Makes sure that labels on products contain required information.
A 3. Inspects and tests drugs, cosmetics, and packaged foods to make sure they are safe to use.
A 4. Sets standards and makes rules about canned vegetables, fruits, eggs, butter, and meat.
B 5. Inspects food and insures a seal of approval.
C 6. Regulates advertising of all products including foods.

DEFINE AND GIVE PURPOSE OF EACH:

1. USDA
2. FDA
3. Dept. of Commerce
4. BBB
5. FTC
6. Food Stamp Program
7. School Lunch Program
8. Child Nutrition Program
9. Current Federal, State and Local Programs

B. ADVERTISING

TRUE - FALSE

T 1. The ultimate goal of advertising is to create brand recognition.
T 2. Nationally advertised brands are usually more expensive than the store brand.
T 3. "Cents-off" coupons are actually a form of advertising.
T 4. The basic purpose of advertising is to entice the consumer.
F 5. Advertising serves no good purpose.
F 6. Advertising has no influence on what people buy.
T 7. The best form of advertising is "word of mouth."
T 8. Newspaper advertising can be used to plan your shopping.

C. FOOD BUDGETS

TRUE - FALSE

F 1. It is difficult to cook creatively on a low or limited budget.
F 2. Items displayed in easy-to-reach locations in a market are usually the best buys.
T 3. Grain products are generally less costly than protein foods or fruits and vegetables.
T 4. The volume of business done by a grocery store will determine the prices of food.

DISCUSSION

1. List ways to save money in the supermarket.
2. How does your income affect the meals you plan?
3. Why should you make a market order?
4. Compare the prices of two staple goods using the newspaper ads. Which would you buy and why?
5. Which food products are graded? Why and how?
6. Describe the container sizes available in canned foods.
7. Tell how the following factors affect the cost of food and equipment: Form and availability, display techniques, culture, weather, transportation, labor, importation.

D. PURCHASING FOOD AND EQUIPMENT

TRUE - FALSE

T 1. Foods are generally less expensive during the plentiful seasons.
T 2. Strawberries shipped from California would generally cost more than native strawberries because of shipping costs.
T 3. Canned or frozen foods may cost less per serving than the same food in the fresh form.
F 4. A higher grade beef (U.S Choice) is more nutritious than a lower grade (U.S. Utility).
F 5. All products purchased at a supermarket are charged to the foods budget.
F 6. Premium stamps given with food purchases are free so consumers should shop at these stores to take advantage of the price savings.
F 7. Food packaged in economy sizes is always less expensive.
T 8. Nutrition labeling provides the customer with information regarding the percentage of the RDA in a serving of a particular product.
F 9. Beautiful packaging ensures higher quality products.
T 10. A freeze in South America can affect the price of bananas in the local supermarket.

E. EATING OUT

TRUE - FALSE

F 1. If the restaurant menu lists foods a la carte, a complete meal is served for the stated price.
T 2. The customary amount of tip to leave when eating in a restaurant is 15% of the bill.

DISCUSSION

1. Give examples of each of the following eating places:
    A. Drive-in
    B. Restaurant
    C. Sandwich Shop
    D. Delicatessen
2. What psychological effect does eating in a fancy restaurant have on you?
3. What are the advantages and disadvantages of eating in the places listed above?

III. MEAL PLANNING AND SERVICE (HOME AND INSTITUTIONAL)

A. PLANNING MEALS

TRUE - FALSE

T 1. Breakfast should provide one-third of the total calories needed daily.
F 2. Organization and meal planning is only important to the working mother.
T 3. The choice of breakfast should be in balance with what one eats for lunch or dinner.

MATCHING

3 a. Place setting for each person.
2 b. Substances in food that help body grow, repair and maintain itself, regulate body processes, and furnish energy and warmth.
6 c. Eating and serving utensils.
5 d. Science or study of food and way body uses it for growth and maintenance.
9 e. Way in which foods are served at meals.
8 f. Simple guide to help select food and plan nutritious meals.
13 g. Food and liquid eaten each day.
10 h. Amount of food to be eaten at one time.
4 i. Variety of foods eaten in sufficient amounts daily to meet body's nutritional needs.
11 j. List of foods for specific meals.
1 k. Portion of food eaten between regular meals.
12 l. Portion of food taken at one time to satisfy appetite and provide nutrients.
7 m. Customs/habits of a racial, religious, or national group.

1. Snack
2. Nutrients
3. Cover
4. Balanced diet
5. Nutrition
6. Tableware
7. Ethnic
8. USDA Daily Food Guide
9. Table service
10. Serving
11. Menu
12. Meal
13. Diet

DISCUSSION

1. List the principles for planning menus.
2. Tell why one should plan menus in advance.

3. List 10 methods of food preparation.
4. Name three ways to save time when preparing and serving meals.
5. List five ways to provide variety in menus.

B. MENU WRITING

TRUE - FALSE

T 1. It is permissable to place the salad at the top of a menu.
F 2. Articles and prepositions should be capitalized when writing a menu.
T 3. The menu should be written symmetrically.
T 4. The beverage is listed last on the menu.
F 5. The salad dressing is listed below the salad.

DISCUSSION

1. List rules for menu writing.
2. PLACE THE FOLLOWING ITEMS IN CORRECT MENU FORM: roast beef, green peas, creamed potatoes, brown gravy, green salad, hot rolls, butter, coffee, strawberry shortcake.

C. MEAL PATTERNS

TRUE - FALSE

T 1. Brunch is a morning meal.
T 2. Vitamin C should be included in breakfast.
F 3. It is necessary to include meat at breakfast.
T 4. If one skips breakfast his body does not function as well as it should.
T 5. The dinner pattern may provide too much food if heavy snacks are eaten during the day.
T 6. Snacks should be planned.

MULTIPLE CHOICE

b 1. Meat Loaf: (a) Baked Irish potato, corn, rolls, tea, jello with whipped cream. (b) Mashed potatoes, string beans, beets, peach cobbler, tea and rolls. (c) Macaroni and cheese, potato salad, fruit cups, rolls and tea.

c 2. Baked beans with bacon: (a) Fried potatoes, buttered carrots, cornbread, and coconut pie. (b) Corn, butter beans, slaw, tea, and cornbread. (c) Slaw, stuffed eggs, cornbread, jello with fruit.

a 3. Macaroni and cheese: (a) Buttered broccoli, stuffed egg and sliced beet salad, cornbread, tea and sliced peaches. (b) Rice and gravy, field peas, green salad, chocolate cake, rolls. (c) Potato salad, butter beans, slaw, cornbread, and coconut pie.

DISCUSSION

1. Define meal patterns.
2. Write a basic lunch pattern.
3. Describe the most important meal of the day.

D. EATING STYLES

TRUE - FALSE

T 1. American food is a combination of many cultures.
T 2. Infants do not develop iron deficiences.
T 3. Sickle cell anemia is not caused by a lack of iron.
T 4. Feeding infants sugar water is a practice that causes poor nutrition.
T 5. Children's appetites vary from day to day.
T 6. The less active adults are, the less food they need.
T 7. The nursing mother needs extra nutrients.

MATCH THE EATING STYLE WITH THE CORRECT FOOD: (A) Finger Foods (B) Fork Food (C) Spoon Food

C 1. Vegetable Soup
B 2. Corn Niblets
A 3. Sandwiches
A 4. Crackers
B 5. Green Peas
C 6. Pudding and Custard
C 7. Ice Cream
A 8. Cookies
A 9. Nuts
A 10. Pickles

MATCH THE TYPE TABLE SERVICE: (A) Formal (B) Family (C) Buffet (D) Apartment/Blue Plate

B 1. Food is placed in serving dishes to be passed at the table.
A 2. Food is served from the kitchen by courses by a servant.
C 3. A large number of people may be served with little or no help.
D 4. Food portions may be regulated.
B 5. Host may carve the meat at the table and serve it.

E. SPECIAL DIETARY NEEDS

TRUE - FALSE

T 1. Being tired is one sign of anemia.
T 2. Those who have poor diets usually recover from diseases like "Flu" more slowly than people who are well nourished.
F 3. If a person wishes to gain weight, the only nutrient which needs to be increased will be fat.
T 4. Eating foods high in cholesterol content may contribute to heart and circulatory diseases.

DISCUSSION

1. Discuss sensible diets for weight loss.
2. Give reasons for the importance of a balance diet for an infant.
3. What special precautions must be taken to ensure an adequate diet for one who is pregnant.

F. TABLE SETTING

TRUE - FALSE

T 1. A table decoration should be simple.
T 2. When setting the table, serving pieces should be placed next to the dish from which the food is to be served.
T 3. Place only those pieces of silverware which will be needed during a meal at each plate setting.
F 4. The cutting edge of the knife is always turned away from the plate.
T 5. The cocktail fork is placed to the right of the spoon.
F 6. The glass is placed at the tip of the fork.
T 7. The cup and saucer should be placed to the right and below the glass.

T 8. To arrange three flowers instead of four makes a more pleasing design.
F 9. Flower stems should all be cut the same length.
F 10. Food should be served from the right side of the person.
T 11. Flower containers should be simple.
T 12. Flowers for the table should be low enough to be seen over when guests are seated.
F 13. The silence pad protects the table.
F 14. One can make a pretty centerpiece only out of flowers.

MATCHING

B 1. An item placed to the immediate right of the dinner plate.
D 2. The side of the guest from which dishes are usually removed from the dining table.
D 3. Side of the dinner plate for the napkin.
E 4. An item placed to the right of the dinner knife.
A 5. An item placed to the left of the dinner plate.
C 6. The side from which additional beverages are served.
C 7. Food is passed in family type services.

A. Fork
B. Knife
C. Right
D. Left
E. Teaspoon

ILLUSTRATE

Draw an individual cover indicating the correct position for (1) the plate, (2) water glass, (3) salad plate or bowl, (4) knife, (5) dinner fork, (6) salad fork, (7) teaspoon, (8) napkin, (9) cup and saucer, (10) juice or wine glass. Identify your drawing by placing the corresponding number on it.

G. TABLE SERVICE

MATCHING

B 1. Food is placed on the table in serving dishes and passed to individuals who serve themselves.
C 2. Guests serve themselves from a large table or counter.
A 3. Individual plates are served in the kitchen.

A. Formal
B. Family Style
C. Buffet

H. TABLE ETIQUETTE

TRUE - FALSE

F 1. When you have finished eating, place the knife and fork on the table.
T 2. If the group is small be sure everyone has been served before you start to eat.
T 3. Few foods are finger foods at dinner parties.
T 4. If you are having difficulty getting food on the fork, such as the last few pieces of a vegetable, push it on with a piece of bread.

MARK AN X BY THE CORRECT STATEMENTS:

Good eating habits include:
___ 1. Eating while rushing around.
X 2. Chewing food thoroughly.
___ 3. Eating candy between meals.
___ 4. Eating pork "rare."

DISCUSSION

Discuss the importance of good table etiquette.

IV. KITCHEN EQUIPMENT

A. LARGE -- HOME AND INSTITUTIONAL

COMPLETION

1. Three considerations that should be given before purchasing large equipment for the kitchen are space, cost, and family needs.
2. Three kitchen appliances that form the work triangle are the sink, refrigerator, and range.
3. The appliance Use and Care Manual provides information on use, care, and safety precautions.
4. A promise made by the manufacturer or his agent concerning performance and quality is called a warranty.
5. Factors to consider when selecting large appliances are cost, connections for utilities, space available, features desired, and care and maintenance.

B. SMALL -- HOME AND INSTITUTIONAL

TRUE-FALSE

F 1. Cookie sheets are long pans with rather high rims.
F 2. A wok is a necessary piece of equipment for stir-fry cookery.
T 3. It is best to "season" cast iron cookware before using it.
T 4. Storage is a consideration when deciding to purchase a small appliance.

MATCHING

Place the letter of each tool beside the procedure with which it corresponds. Each tool may not have a matching procedure.

Procedure

B 1. Mincing and cutting nuts, celery, onions
L 2. Frosting cakes
D 3. Turning a roast
M 4. Cleaning sides of bowls and mixers
K 5. Removing liquid from foods or pureeing vegetables
G 6. Beating ingredients to incorporate air
E 7. Paring or cutting fruits and vegetables
C 8. Beating icings, eggs, and cream
A 9. Removing a thin layer of skin from fruits and vegetables
H 10. Creaming and stirring sauces

Tools

A. Peeler
B. French or Chef's Knife
C. Rotary Beater
D. Two-tined Fork
E. Paring Knife
F. Kitchen Spoons
G. Wire Whisk
H. Wooden Spoon
I. Basting Spoon
J. Colander
K. Strainer
L. Spatula
M. Rubber Spatula

Match A, B, or C with the appropriate group of utensils.

A 1. Pastry blender
Mixing bowls
Measuring cups
Spatula
Baking pans

C 2. Shears
Garbage container
Scouring pads
Dish towels
Scraper

B 3. Skillets
Measuring spoons
Cooling racks
Tongs
Vegetable bowl

A. Food Storage and Preparation Center

B. Cooking and Serving Center

C. Cleaning Center

Match the kitchen utensil or tool with the function that it performs.

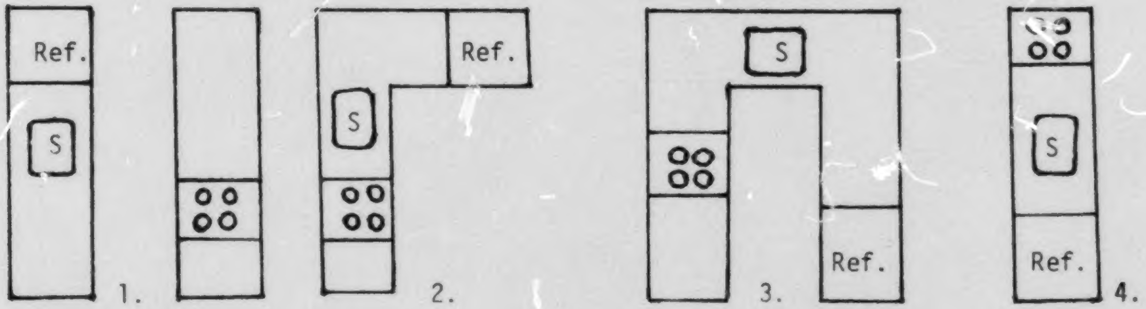
		Use		Tool
E	1.	Useful for draining liquids	A.	Rubber scraper
C	2.	Does not conduct heat	B.	Wire whip or whisk
D	3.	Non-electric utensil for mixing	C.	Wooden spoon
B	4.	Used for beating egg whites	D.	Rotary beater
F	5.	Useful for carrots and potatoes	E.	Colander
G	6.	Useful in frosting cakes	F.	Peeler
H	7.	Blends shortening with dry ingredients	G.	Spatula
A	8.	Cleans batter from bowls	H.	Pastry blender

DISCUSSION

1. Discuss ways that these appliances may be helpful as time-savers and energy savers for home use.
    - A. Mixers -- hand and standard
    - B. Coffee makers
    - C. Knife sharpeners
    - D. Can openers
    - E. Electric knives
    - F. Blenders
    - G. Frypans
    - H. Broiler and rotisseries
    - I. Ovens that bake and broil
    - J. Slow cookers
2. List standard tools used for measuring ingredients.
    - A. Measuring cups -- liquid, dry
    - B. Measuring spoons
    - C. Spatula
3. Explain the difference between the cups used for measuring liquid and dry ingredients.

KITCHEN ARRANGEMENT

1. Identify the four basic arrangements of kitchens used to accommodate the work triangle.



1. Hall or corridor
2. L shaped
3. U shaped
4. One walled

C. ENERGY

TRUE-FALSE

T 1. Energy is the capacity of acting.
T 2. Some familiar sources of energy are gas, electricity, solar, and coal.
T 3. Turn off light bulbs and appliances when not in use to conserve energy.
T 4. Read the owner's manuals for proper use and care of appliances.
F 5. Freezers and refrigerators operate most efficiently when opened frequently.
T 6. Oven cooking uses less heat than surface cooking.
T 7. To get maximum use of fuel, cook an entire meal in either the oven or broiler.
T 8. Thaw frozen meats to reduce cooking time.
F 9. Preheat the oven only for baking.
F 10. Open and close the oven door frequently.
T 11. Load the oven to capacity when in use.
T 12. Ovenproof glass, glass ceramic, or earthenware dishes may be used for oven cooking.
T 13. Use a pressure cooker for less tender cuts of meat.
T 14. Use small appliances for cooking small amounts of food.
T 15. Turn a gas range off immediately after use.
T 16. Use pots and pans to fit the size of surface units.

D. SAFETY PROCEDURES

CASE STUDIES

For each of the following situations explain one precaution that might have prevented the accident described.

1. Jane's hands were wet when she plugged the cord of the toaster into an outlet, and she received an electrical shock.
2. Anthony was burned when he hit the handle of a saucepan that was on the range.
3. Jill slipped and fell on some food that had been spilled on the floor.
4. Sue cut her hand on knives that were in a cabinet drawer.
5. Kevin burned his hand on a pan while he was removing it from the range.
6. Toney dropped the castiron lid on his foot when the hot steam got in his face.

7. Larry bumped his head on the opened cabinet door; it took five stitches to close the cut.
8. The accumulated grease on Mary's range caught fire while she was frying chicken and smoked the new paint on the wall.
9. Pete fell off a stack of books and broke his hip while trying to reach the blender on the top shelf.
10. Irma noticed smoke coming out of the waste basket where she had just thrown a match after use.

V. SAFETY AND SANITATION

MULTIPLE CHOICE

B 1. Infectious hepatitis (a) is spread by hypodermics (b) may follow eating shellfish (c) results from bacterial action (d) is not affected by cooking.

D 2. Bacterial toxins are (a) found in all foods (b) cause only mild indigestion (c) harmless, but bad tasting (d) sometimes extremely poisonous.

A 3. Bacteria that survive canning processes are (a) thermophilic (b) thermophobic (c) botulinum (d) streptococci.

C 4. The most dangerous source of infection is (a) air borne bacteria (b) usually not identified (c) human fecal matter (d) poorly canned fruit.

D 5. Most local laws dealing with food sanitation are set by (a) American Public Health Association (b) National Restaurant Association (c) Food and Drug Administration (d) U.S. Public Health Service.

D 6. Enforcement of health and safety is the responsibility of (a) Department of Labor (b) federal government (c) U.S. Department of Agriculture (d) local health department.

C 7. In order to grow rapidly, bacteria needs (a) living cells in which to grow (b) temperature above 135°F (c) food, moisture, and favorable temperature (d) all of the above.

B 8. The best procedure to follow in cleaning electrical equipment is to (a) turn it off before cleaning (b) turn it off and disconnect before cleaning (c) remove fuse or turn off electricity at the main switch box (d) wipe with a damp cloth immediately after use.

D 9. Items which may be handwashed together are (a) china and silver (b) silver and glassware (c) silver and serving dishes (d) pots and pans.

B 10. To prevent contamination when cutting or slicing food, the worker should use (a) a wooden chopping board (b) a non-porous chopping board (c) the counter top.

TRUE-FALSE

T 1. Botulism is a type of food poisoning, often proving fatal.
F 2. Botulism is easily detected by the strong smell.
F 3. Bacteria are destroyed when frozen.
T 4. Bacteria double in number every fifteen minutes if conditions are favorable.
T 5. Mishandling of food is the most common cause of food borne illnesses.
T 6. Housekeeping supplies should be stored away from food.
F 7. If a fire ignites while frying fish, the cook should immediately douse it with water.
T 8. A good order for washing dishes is: china, glassware, silverware and then cooking utensils.
T 9. Open the lids of pots and pans away from user so steam will not burn.
F 10. Disconnect cords by pulling the cord.
T 11. Dangling jewelry should not be worn in the kitchen.
T 12. Many pieces of kitchen equipment are dangerous if not used correctly.
T 13. A grease fire can be extinquished by pouring salt or baking soda over the flame.
F 14. Check to be sure that you have turned the electric range unit off by touching it lightly.
T 15. People with mild food poisoning may think they have the flu.
F 16. Electrical cords should be run under rugs so that people will not trip over them.
T 17. Insects and other pests are attracted by spilled and opened foods.
T 18. Industrial wastes that pollute the air and water may contaminate the foods we eat.
T 19. Disconnect portable appliance when not in use.
F 20. If the dish towel appears to be clean, it is sufficient indication of a bacteria-free environment.

ESSAY -- SHORT ANSWER

1. List three rules one should follow in the safe use of knives.

2. Describe ways to control insects and rodents.

VI. MANAGEMENT

A. ENERGY (HUMAN) CONSERVATION

TRUE - FALSE

T 1. It is more efficient to boil water in a tea kettle than in an open sauce pan.
T 2. A water heater and range are high energy users.
T 3. A frost-free refrigerator uses more energy than a manually defrosted model.
F 4. Refrigerator seals should be loose enough so as not to cause an air lock.
T 5. The values of each family determine their lifestyle.

SEQUENCE

1. Number the following in order from lowest (1) to highest (4) in terms of direct energy cost.

1 Drying food by solar energy
4 Freezing
2 Drying food by other means
3 Canning

2. In terms of energy required, which of the following ranks lowest (1) to highest (4).

2 Water heaters
3 Space heating and cooling
1 Food preservation or storage

B. TIME CONSERVATION

TRUE - FALSE

T 1. In order to save time and energy, a working person usually spends more money on food than one who does not work.
T 2. Time conservation is closely allied with work simplification.
F 3. A schedule is helpful but only if one follows it without any deviation.

F 4. Meal planning saves money but does not save time.
T 5. Frank and Lillian Gilbreth were two pioneers in time and motion studies.

DISCUSSION

1. Name three ways to save time when preparing meals.
2. Give a menu and number in order which tasks should be done -- first, second, third, etc.

C. WORK SIMPLIFICATION

TRUE - FALSE

T 1. Even after a job analysis is complete and a better method has been developed, employing the new methods is often hampered by old habits.
F 2. Storage of food and equipment has nothing to do with work simplification.
F 3. Dovetailing tasks creates confusion when incorporated in meal preparation.
F 4. It is unwise to cook meals for two days at once.
T 5. Families can simplify meals by sharing tasks.

DISCUSSION

1. What steps are involved in simplifying a task?
2. List 5 labor saving devices found in the kitchen and discuss their usefulness.
3. List three ways a large family can simplify meal preparation.

D. ORGANIZATION OF KITCHEN

TRUE - FALSE

F 1. The old adage "A place for everything and everything in its place" is passe'.
F 2. The term "Country Kitchen" means that a kitchen has antique furniture.
T 3. When planning a kitchen, the basic shapes have value as a guide but are not absolute.
T 4. The cabinets in most homes are usually too deep for efficient storage of cans and packaged goods.
F 5. The more doors in the kitchen, the better.
T 6. When building or remodeling a house, one should consider the location of the carport or garage in relation to the kitchen.

FILL-IN-THE-BLANK

1. In kitchen planning, the placement of the sink, refrigerator, and range form the triangle.
2. A U-shaped kitchen arrangement usually has the sink in the center.
3. Insufficient counter space is more likely in a wall type kitchen.
4. Traffic may be a problem in a corridor shaped kitchen.
5. The basic work centers in a kitchen are baking (or mixing), cooking and serving, and sink.

VII. FOOD PREPARATION

A. WEIGHTS AND MEASURES

TRUE - FALSE

F 1. After flour is sifted, it should be packed in the measuring cup and leveled with the top of the cup.
F 2. The only way to measure shortening is to first melt it.
F 3. The U.S. is one of the first nations to use the metric system.
T 4. If all of a quart bottle of milk was poured into a litre container, the milk would overflow.

MULTIPLE CHOICE

b 1. Which of the following is not a metric measure: (a) gram (b) ounce (c) litre (d) kilo
c 2. The only dry ingredient which should be packed in measuring is: (a) corn meal (b) corn starch (c) brown sugar (d) flour
a 3. The boiling point of water is: (a) 212 degrees F (b) 200 degrees F (c) 100 degrees F (d) 112 degrees F.

FILL-IN-THE BLANK

1. Complete the Following:
16 oz = 1 pound
2 pts = 1 quart
3 tsp = 1 tablespoon
16 T = 1 cup
8 oz = 1 cup
16 C = 1 gallon
4 qts = 1 gallon
16 T = 1 cup
2 C = 1 pint

2. Give abbreviation for the following words used in recipes.

t/ tsp	teaspoon	c	cup	qt	quart
pt	pint	oz	ounce	gal	gallon
lb	pound	l	litre	kg	kilogram
g	gram	°C	Celsius	tbls/T	tablespoon
dz/ doz	dozen	m	metre	min	minute

3. In the column on the left are ingredients needed for making 18 baking powder biscuits. In the column on the right, give the ingredients needed for making 9 baking powder biscuits.

ORIGINAL RECIPE			ONE-HALF RECIPE		
2 c	(500 ml) sifted flour		1	c	(250 ml)
1 t	(5 ml) salt		1/2	t	(3 ml)
4 T	(60 ml) shortening		2	T	(30 ml)
4 t	(20 ml) baking powder		2	t	(10 ml)
3/4 c	(188 ml) milk		3/8	c	(94 ml)

B. RECIPE USE

MATCHING

E 1. To manipulate dough by folding over and gently applying pressure with the heel of the hand.

B 2. The gentle cutting and turning under motion used to blend ingredients, especially egg whites.

A 3. To soften and smooth a substance such as fat by mashing it against the sides of a bowl or combining with another ingredient until it is a smooth consistency.

D 4. To cut into small pieces.

C 5. To blend a dry ingredient with fat until it closely resembles corn meal by using knives or pastry blender.

A. cream
B. fold in
C. cut in
D. dice
E. knead

MATCHING

C 1. Cook in a deep layer of fat
E 2. Cook by dry heat in an oven
H 3. Cook uncovered in a fry pan with no fat
A 4. Cook by direct heat
D 5. Boil until partially cooked
B 6. Cook in a small amount of fat
G 7. Cook in water or liquid in which bubbles rise and break on the surface
F 8. Cook in oven uncovered

A. Broil
B. Pan-fry
C. Deep-fry
D. Par-boil
E. Roast
F. Bake
G. Boil
H. Pan broil

C. EQUIPMENT

TRUE - FALSE

T 1. Warranties and seals of approval protect the consumer from defective merchandise.
F 2. Delivery and installation costs of appliances are always included in the quoted selling price.
T 3. Detachable cords for appliances should be plugged into the appliance first and then the outlet.
T 4. Studies show that many service calls are unnecessary.

MATCH THE PREFERRED PIECE OF EQUIPMENT WITH THE TASK

C 1. To level a tablespoon of flour
D 2. To remove batter from the mixing bowl
C 3. To remove muffins from a pan
A 4. To mix cake batter
G 5. To cook an omelet
H 6. To measure hot water
I 7. To measure 1/2 c. sugar
I 8. To measure flour
G 9. To fry bacon
E 10. To peal a potato

A. Wooden spoon
B. Aluminum spoon
C. Spatula
D. Rubber scraper
E. Paring knife
F. Double boiler
G. Frying pan
H. Pyrex measuring cup
I. Aluminum or plastic measuring cup
J. Sauce pan

D. BASIC PREPARATION

1. APPETIZERS

TRUE - FALSE

T 1. Trimming crusts of dainty sandwiches is generally accepted although it could be a matter of personal preference.
F 2. Hors d'oeurve is a French style appetizer that is served with small rolls.
T 3. Dips and chips can serve as an appetizer.
T 4. Appetizers are often dainty foods.

MATCHING

E 1. Olives, pickles and crisp raw vegetables.
C 2. Small open-faced sandwiches.
D 3. Colorful, highly seasoned portions of food that are small enough to be eaten from the finger or small pick.
A 4. Extracts from fruits or vegetables that may be seasoned.
B 5. Mixed fresh fruits, seafoods served whole or on the half shell.
G 6. Well-seasoned food mixtures similar in consistency to sandwich fillings.
F 7. Very soft spreads used with chips, crackers or croutons.

A. Juice
B. Cocktail
C. Canapes
D. Hors d'oeuvers
E. Relish
F. Dips
G. Spreads

2. BEVERAGES

TRUE - FALSE

F 1. One should boil tea leaves so a smaller quantity is needed for desired strength.
T 2. Cafe Au Lait is a combination of milk and coffee.
T 3. Both tea and coffee contain stimulants.
T 4. Boiled coffee is better called pan coffee.
F 5. Tea should be brewed for 15 minutes.
F 6. Steeping is the same as boiling.
T 7. The official coffee measure holds two tablespoons.
T 8. Chocolate milk has more calories than plain milk.
F 9. It is not necessary to wash the coffee pot between each use.
T 10. Hot chocolate is richer then cocoa.

SHORT ANSWER

1. What stimulant do coffee, tea, cocoa and cola have?
2. Which nutrient is lost if fruit juices are not stored properly?

3. BREADS

TRUE - FALSE

T 1. Yeast breads require a period of rising prior to baking.
T 2. Steam causes popovers to rise.
T 3. Gluten is the protein in flour.
F 4. Working yeast dough with the hands in a pushing and pulling motion is called rolling.
F 5. Butter or margarine should be used to grease baking pans.
T 6. Flaky baked products are called pastries.
T 7. A method in which the liquid is poured all at once into the flour mixture and stirred only until the flour is moistened is called the muffin method.

DISCUSSION

1. Describe the difference between shortened and unshortened cakes.
2. Explain the differences between quick breads and yeast breads.
3. List the steps in preparing food by the muffin method.

MATCHING

C 1. Makes quick bread tender and flaky.
E 2. When used as the only liquid in quick bread, the texture will be coarse.
A,B 3. This liquid adds food value and flavor.
B 4. Serves as a binder to hold the ingredients together.
D 5. Gives the surface of quick bread a golden brown color.

A. Milk
B. Eggs
C. Fat
D. Sugar
E. Water

4. CAKES

TRUE - FALSE

T 1. Basically, there are only two types of cakes, shortened and unshortened.
T 2. The three methods of mixing cakes are known as conventional method, quick method and chiffon cake method.
F 3. Unshortened cakes depend on baking powder for leavening.
T 4. An unshortened cake will continue to cling to the pan even when done.
T 5. All-purpose flour is generally used for most baked products.
F 6. The texture of cakes made with all-purpose flour is just as fine as cakes made with cake flour.
T 7. Cake pans with a light, dull finish such as aluminum are used successfully for baking cakes.
T 8. Over-mixing cakes will overdevelop the gluten and cause toughness.
F 9. All cakes are cooled on racks in an upright position.
T 10. Frostings may be classified as cooked or uncooked.
F 11. The fanciest cakes are the best.
T 12. Angel food and sponge cakes contain no shortening.
F 13. The only purpose of frostings on cakes is to add calories.

LISTING

1. Name the three general types of cakes and give basic differences.
2. Which is iced first, the top or the sides of a cake?
3. Give 2 advantages and 2 disadvantages of using cake mixes.

MATCHING

Cake Type
A. Butter
B. Sponge
C. Chiffon

A 1. Pound Cake
C 2. Gelatin Cake with corn oil
A 3. Fruit Cake
B 4. Angel Food Cake

MATCHING

D,F 1. Flour
C 2. Shortening
C,B,A 3. Sugar
F,G 4. Milk
H,E,F,G 5. Eggs
F,A 6. Nuts, fruits
H 7. Baking powder

A. Gives flavor
B. Assists in browning
C. Gives fine texture
D. Provides structure
E. Gives color
F. Adds nutrients
G. Provides moisture
H. Serves as a leavening agent

5. CANDIES

TRUE - FALSE

F 1. Shortcuts in recipe instructions can be tried when preparing candy.
T 2. Candies are an example of a carbohydrate food.
T 3. In making candy, the softball stage is 234° F. or 112° C.
T 4. When making fudge, it is important to allow the heated mixture to cool, undisturbed, to 110° F. before beating.
T 5. The making of crystalline but creamy products, such as fudge, requires that the sugar first be completely dissolved.

FILL IN BLANKS

1. An example of a non-crystalline product is caramels.
2. An example of a crystalline candy is pralines.
3. Taffy is an example of pulled candy.
4. In order to ensure consistency and uniformity when making candy, a candy thermometer is used.
5. We test a candy thermometer by immersing it is boiling water.

6. CASSEROLES

TRUE - FALSE

T 1. Casseroles are usually measured by quart sizes.
F 2. A dish must contain rice or pasta to be classified as a casserole.
T 3. Casserole dishes can be made of glass or metal.
T 4. Lasagne is a casserole built in layers in a shallow dish.
T 5. Preparing a casserole may be very complicated or very simple.
T 6. Some casseroles are mixed before placing in the dish.
T 7. Canned tuna is a convenient protein ingredient in casseroles.
T 8. Souffle is the French word for "Puffed up."
T 9. Most casseroles require a soup, sauce, or thickening agent to bind ingredients.

ESSAY

1. Plan a meal using a casserole as the main dish.
2. List three methods for mixing casseroles.

7. CHEESE

TRUE - FALSE

T 1. Cheese becomes tough and rubbery when cooked at a high temperature.
T 2. If cheese is grated it will melt faster than cubes or solid pieces.
F 3. Cheddar cheese tastes best when it is served well chilled.
F 4. Cheese should be cooked at high temperature because it is composed of protein and fat.
T 5. Cheese is a convenience food.
T 6. Cheese can be substituted for meat in menu planning.
T 7. Cottage cheese is more perishable than cheddar cheese.
T 8. Au gratin means that cheese has been added to the recipe.
T 9. Cheese makes a nutritious snack.
T 10. Cheese is sometimes served as the dessert of a meal.
T 11. Cheddar cheese has a low melting point.
T 12. Cottage cheese and cream cheese are made in the same general way.
T 13. A one inch cube of cheese is equivalent to one glass of milk in nutritional value.
F 14. The chief mineral in cheese is iodine.
T 15. Protein is the chief nutrient in cheese.
T 16. One pound of cheese will produce four cups of grated cheese.

MATCHING: A. soft B. Semi-soft C. Hard D. Very hard

A Cottage
C Swiss
C Cheddar
B Blue

A Cream
C Edam
C Gouda
A Camembert

D Parmesan
D Romano
A Mozzarella
B Roquefort

A Brie
A Neufchatel

DISCUSSION

1. Give the three classifications of cheese and give one example of each.
2. Name some uses of cheese in menu planning and preparation.
3. Explain what is meant by aging cheese.
4. What precautions must be taken in cooking cheese?
5. List the main food values of cheese.
6. What is a processed cheese?

8. CONVENIENCE FOODS

TRUE - FALSE

F 1. A good cook never uses any of the convenience foods.
F 2. People who choose to use convenience foods show no creativity in cooking.
T 3. Convenience foods may be frozen, canned, or dried.
T 4. Convenience foods make preparation of a variety of foods possible in a minimum amount of time.

DISCUSSION

1. Give example of how convenience foods can be utilized to meet nutritional needs.
2. How can you change your consumption of convenience foods to improve your "meals on the run."

9. COOKIES

TRUE - FALSE

T 1. Cookie recipes usually call for little or no liquid.
T 2. All types of cookies should be stored in tightly covered containers.
F 3. Place the baking sheet on the lowest rack in the oven so that the cookies will be close to the heat.
F 4. Cookies should not be checked at the minimum baking time because opening the oven too soon will cause cookies to fall.
T 5. Cookies are classified according to batter types.

MATCHING

D 1. Made from a stiff rich dough which is forced through a cookie press to give it a shape.
A 2. Cookies made from a soft dough which is pushed from a spoon onto a baking sheet in the desired size.
C 3. Cookies shaped by hand from small portions of stiff dough.
B 4. Cookies cut from a thin sheet of a stiff dough with cutters of various shapes.
E 5. A soft dough baked in a shallow pan and cut into desired shapes when done.

A. Drop
B. Rolled
C. Molded
D. Pressed
E. Bar

10. DESSERTS

TRUE - FALSE

T 1. A light dessert is generally served after a heavy meal.
T 2. Cornstarch and flour may be used as thickening agents in puddings.
T 3. A dessert is any food that is served at the end of a meal.
F 4. All desserts are baked products.
T 5. A light meal can be enhanced by a rich nutritious dessert.
T 6. Custard is a cooked mixture of egg, milk, and sugar.
T 7. In terms of economy, one may use cornstarch rather than eggs as a thickening agent.
T 8. Stewed fruit is best served plain.

T 9. Gelatin requires refrigeration to set the gel.
T 10. Ice cream is frozen by using a mixture of salt and ice.

DISCUSSION

1. List the six classifications of desserts.
2. Name two types of custards and give the basic differences of each.
3. Explain why biscuit, cake, and pastry desserts should be served with light meals.

11. EGGS

TRUE - FALSE

T 1. Eggs become tough when cooked at a high temperature.
T 2. The yellowish-green color around an egg yolk results from a too high temperature for too long a time.
T 3. Eggs separate easier when cold, but whip better when at room temperature.
T 4. The tiniest bit of yolk or fat will prevent egg whites from whipping.
T 5. Regardless of grade, all eggs have the same nutritive value.
F 6. Eggs should be cooked quickly and at a high temperature.
F 7. Eggs are the only thickening agent that can be used in food preparation.
T 8. Eggs improve the nutritive value of cakes, as well as hold in the gas of leavening agents.
T 9. Three eggs per week are sufficient for the average person.
F 10. White eggs are higher in food value than brown-shelled eggs.
F 11. The Grade AA egg has more nutritive value than the Grade B.
T 12. Eggs are emulsifying agents which keep ingredients from separating.
T 13. The diet of the hen will affect the flavor of the egg.
T 14. Eggs that have been properly stored may be fresher than newly laid eggs that have not been refrigerated.
T 15. Eggs should be washed before storing in the refrigerator.

DISCUSSION

1. Identify the functions of eggs in food preparation and give examples.
2. Name the main nutrients found in eggs.
3. What are the three stages of beating egg whites?
4. Describe the correct storage procedure for eggs.
5. What are the basic principles of egg cookery?
6. Discuss ways that eggs can be used in meal planning.

12. FATS AND OILS

TRUE - FALSE

T 1. Weight gain is generally the result of excess fat.
T 2. Fats and oils occur naturally in animal and plant tissues.
T 3. Animal sources of fat are generally solids while plant sources are usually liquid.
T 4. Lard is made by heating fatty tissues trimmed from market cuts of pork.
F 5. Excess absorption of fat is desirable in fried foods.
T 6. The best temperature for frying foods in 365° F.
T 7. Fried foods should be drained on paper towels to absorb excess fat prior to serving.
T 8. Oils and fats may be clarified by adding four or five thin slices of raw potato for each cup of fat and heating slowly for twenty minutes.
T 9. Overheating causes undesirable changes in fat.
T 10. Fats help tenderize batters and doughs.

DISCUSSION

1. List the types of fats (butter, margarine, shortening, vegetable oil) and discuss characteristics and uses of each.
2. Explain the difference in saturated and unsaturated fats.
3. Define smoking point and discuss the significance in the choice of fats.

13. FISH

TRUE - FALSE

T 1. Generally speaking, fish is lower in calories than other protein-rich foods.
T 2. Frozen fish should not be kept for long periods of time.
F 3. Fish should never be served for a meal when guests are invited because someone may swallow a bone.
T 4. Seafood is an extremely good source of iodine, a mineral which prevents goiter.
T 5. Fish is more easily digested than beef or pork.
T 6. Most fish are poor sources of calcium except for those varieties canned with bones.
T 7. Both dry and moist heat methods can be used for cooking fish of all kinds.
T 8. The cooking method of fish is often determined by its fat content.
T 9. Calcium is unusually high in oysters and shrimp.
T 10. Freshness in fish can be preserved by immediate refrigeration.

MATCHING

B 1. Dressed
C 2. Filet
D 3. Steak
A 4. Shucked

A. Taken from the shell
B. Heads, tails, entrails and fins removed
C. Lengthwise slices from the backbone
D. Crosswise slices

DISCUSSION

1. List the classification of fish and name varieties in each classification.
2. List a variety of ways to cook fish.
3. Figure cost per serving of various types of fish and compare cost with other protein sources.

14. FRUITS

TRUE - FALSE

F 1. Unripened fruits and vegetables may be ripened in the refrigerator.
F 2. Fruits contain large amounts of protein.
T 3. Heat increases the destructive action of air on Vitamin C in fruits.
T 4. A large portion of the Vitamin C in fruits is found near the skin.
T 5. Fresh fruits require cool dry storage.
F 6. Washing fresh fruits before using causes loss of nutrients.
T 7. Canned, frozen, and dried fruits are called processed fruits because they have undergone some treatment to make them keep longer.
T 8. The most dependable all-year source of ascorbic acid is probably citrus.
T 9. Botanically, a fruit is any developed ovary of a seed plant.
F 10. Summer apples tend to have excellent keeping qualities.
T 11. Pineapple must be cooked before using in congealed desserts.
T 12. Cooking apples should be tart in flavor.
T 13. Peach skin can be loosened by a dip in boiling water.
T 14. Fruit cooked in syrup maintains its shape better than fruit cooked in water.
T 15. Fruits are especially important to the diet for the vitamins they contain.

MULTIPLE CHOICE

A 1. Watermelon, peaches, and cantaloupe are special sources of (a) Vitamin A (b) Vitamin C (c) Vitamin B

B 2. Oranges are unique for their richness in (a) iron (b) calcium (c) phosphorus

A 3. To save Vitamin C (a) serve fruits raw when possible (b) serve fruit cooked when possible (c) serve fruit after it is peeled and turned brown

B 4. It is best to buy fruits and vegetables fresh (a) out of season (b) in season (c) only on Thursdays

D 5. Raisins are (a) disappearing from the market (b) fresh, rather acid berries (c) preserved with sugar (d) dried grapes

C 6. The Valencia orange (a) has no seeds (b) ripens in the winter (c) ripens in the summer (d) is also called the Florida Orange

DISCUSSION

1. What are three principles to keep in mind when preparing fruit?
2. How can you prevent the darkening of cut surfaces on fruits such as apples and bananas?
3. Describe what qualities you should look for when selecting fresh fruits.

15. GRAIN AND GRAIN PRODUCTS

TRUE - FALSE

T 1. Some ready-to-eat cereals have more sugar than cereals that must be cooked.

F 2. White rice contains more nutrients than brown rice.

T 3. Products made from the entire kernel are called whole grain.

T 4. Pasta should be stored in a cool, dry place.

MULTIPLE CHOICE

D 1. One of the following is not considered a grain (a) wheat (b) rice (c) corn (d) soybeans

C 2. One of the following does not come from grain (a) wheat germ (b) pop corn (c) potato flour (d) oatmeal

C 3. One of the following is classified as a batter rather than a dough mixture (a) biscuits (b) pie crust (c) pancakes (d) sugar cookies

B 4. The part of the cereal grain containing the most nutrients is the (a) bran (b) germ (c) endosperm (d) ectomorph

D 5. Starch must be cooked to make it (a) edible (b) have flavor (c) dissolve in water (d) all of the above (e) none of the above

16. MEATS

TRUE - FALSE

F 1. The U.S. Inspection Stamp indicates the brand name and quality of the meat.
T 2. The U.S. Inspection Stamp indicates that the meat comes from healthy animals that are slaughtered under sanitary conditions.
F 3. The U.S. Inspection Stamp is on all meat that is sold.
F 4. Grading of meat is required by law.
T 5. Grades of meat are determine largely by the fat content or marbling.
F 6. Grading of meat refers only to the proportion of edible meat to bone.
T 7. Standard names have been developed for cuts of meat by The National Livestock and Meat Board.
T 8. Beef comes from mature cattle over one year old.
T 9. Cuts from beef rib, short loin and sirloin are considered tender.
T 10. Veal comes from immature cattle from four to eight weeks old.
T 11. The top grade of meat is known as prime.
T 12. The cost of meat is influenced by supply and demand.
T 13. The forms of meat are fresh, canned, cured and frozen.
T 14. The location of the meat cut on the animal is a clue to its tenderness.
T 15. Lamb is the flesh of sheep not more than fourteen months old.
T 16. Trichinosis is a disease of muscles, tendons, and intestines caused by a parasite which may be found in pork.
T 17. The nutrient contributions of meats are protein, minerals and vitamins.
F 18. To store meat properly remove the wrapper from the fresh meat; wipe with a moist towel and place in the meat keeper in the refrigerator.
T 19. Store cold cuts, bacon and ham in their original wrapper in the meat keeper of the refrigerator.
T 20. Store large canned hams in a cool dry place.

MATCHING

D 1. Roasting
F 2. Stewing
C 3. Broiling
B 4. Braising
G 5. Frying
E 6. Sauteing
A 7. Pan-broiling

A. Cooking meat in a skillet without adding fat.
B. Browning meat, cooking in a tightly covered pan with little or no moisture.
C. Cooking meat above or below direct heat from an oven unit or glowing coals.
D. Cooking large cuts of meat uncovered in an oven without the addition of moisture.
E. Cooking in a small amount of fat in an uncovered skillet.
F. Cooking in water to cover meat for a long period of time.
G. To cook in hot fat.

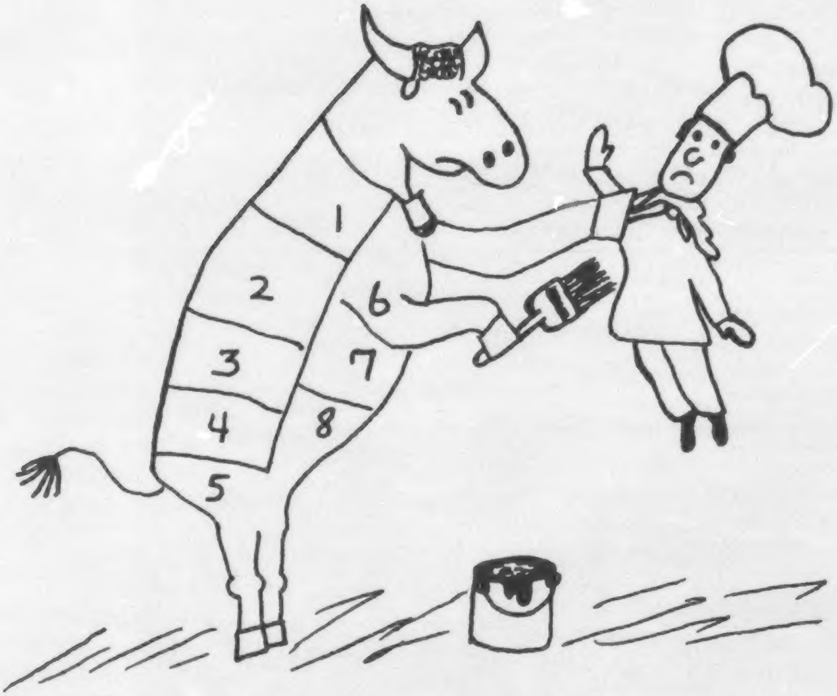
DISCUSSION

1. Give examples of variety meats (liver, heart, kidney, and sweetbread) and discuss methods of preparation and nutritive value.
2. Explain the difference in protein furnished by meat and that furnished by dried peas or beans.

IDENTIFICATION

1. Identify the wholesale cuts of beef by writing the names opposite the appropriate numbers.*
    1. Chuck
    2. Rib
    3. Short Loin
    4. Sirloin and Tip
    5. Round and Tip
    6. Fore Shank and Brisket
    7. Short Plate
    8. Flank

*Answers are obtained from the diagram on the following page.



2. List two retail cuts from each of the wholesale cuts:

1.	Ground Beef	Blade Roast
2.	Rib Eye	Rib Steak
3.	T-Bone Steak	Porterhouse Steak
4.	Boneless Sirloin	Pin Bone Sirloin Steak
5.	Round Steak	Rolled Rump Roast
6.	Shank Cross Cuts	Beef Stew
7.	Fresh Brisket	Corned Brisket
8.	Ground Beef	Flank Steak

17. MILK

TRUE-FALSE

F 1. Homogenized milk is made from dry milk powder which is mixed with water.

F 2. Adults need just as much milk per day as children.

T 3. Part of the water has been removed from milk to form condensed or evaporated milk.

T 4. Milk equivalent means the other foods that have the same amount of nutrients that milk contains.

T 5. Dried milk has the same nutritive value as fresh milk.

F 6. All milk products should be stored in the refrigerator.

T 7. Sweetened condensed milk has sugar added to it.

T 8. The most important principle in cooking with milk is to use low heat.

T 9. Whipped cream is primarily fat.

F 10. Whipped cream has about the same number of calories as non-fat whipped topping.

T 11. Lemon juice will cause milk to curdle.

F 12. Cook milk rapidly to avoid curdling.

MULTIPLE CHOICE

C 1. Milk which is free of bacteria is known as (a) whole (b) warmed (c) pasteurized (d) disinfected.

B 2. Pregnant and nursing women require from (a) 1 to 3 (b) 5 to 6 (c) 7 to 10 (d) 11 to 14 cups of milk a day.

B 3. Adults require (a) 1/4 (b) 1/2 (c) 3/4 (d) same amount of milk as children.

B 4. Milk is scalded when (a) large bubbles form on top (b) it coats or adheres to a spoon (c) it feels warm.

C 5. One serving of milk is (a) 4 oz. (b) 6 oz. (c) 8 oz. (d) 14 oz.

DISCUSSION

1. Explain how the cook can prevent two of the following: boiling over, scorching, curdling, or scum/film formation.
2. If a person does not like milk as a beverage, what are other ways of including it in meal planning?

3. What principles of cooking should one employ in using milk?
4. What is meant by Vitamin D fortified milk?
5. Why is the double boiler a useful pan to use in preparing a recipe that is made with milk?

18. PIES AND PASTRIES

TRUE - FALSE

T 1. Pies are judged on appearance, pastry and filling.
F 2. When preparing pie crust work the fat into the flour and salt until the particles are very fine.
T 3. When rolling pie crust roll from the center out.
T 4. If a pastry blender is not available one can use two knives to cut fat into flour.
T 5. Pie crust may be made in quantity and stored in a freezer.

COMPLETION

1. Pie crust's essential ingredients are (flour), (fat), and (water).
2. To thicken fruit juices for pie making the cook uses (flour), (cornstarch), or (tapioca).
3. The mixture of fluffy, beaten and sweetened egg whites that is baked is called (meringue).
4. A general term covering several classes of baked goods which have a flaky consistency is (pastry).
5. When preparing pie crust, it is preferable that the (water) be chilled.

MATCHING

D E F 1. Pastry crumbles and is mealy
A C G 2. Pastry is tough
B 3. Pastry tastes rancid
B A 4. Bottom crust is soggy

A. Too much water
B. Too low a temperature used
C. Too much flour
D. Flour and fat overmixed
E. Hot water used
F. Oil used instead of shortening
G. Pastry overmixed

19. POULTRY

TRUE - FALSE

F 1. Fried chicken will be done when the crust is a golden brown.
T 2. It is acceptable to buy Grade B chicken when used in chicken salad.
T 3. Dressing should be placed in poultry just before roasting to prevent the growth of harmful bacteria.
F 4. Poultry may be stored safely in the refrigerator one week.
T 5. Turkey, duck and goose are classified as poultry.
F 6. As a rule, fat in poultry is just under the skin.

MULTIPLE CHOICE

B 1. Breading on frying chicken (a) makes it easier to handle (b) is fragile (c) decreases sticking to the pan (d) should not contain egg.
A 2. Chicken broiling time is usually (a) 30 to 40 minutes (b) 40 to 50 minutes (c) 20 to 30 minutes (d) 10 minutes to the pound.

DISCUSSION

1. What is the test for doneness when frying a chicken?
2. State the principle for cutting up a chicken.

20. SALADS AND SALAD DRESSINGS

TRUE - FALSE

T 1. Lettuce should be washed even if it was wrapped in the store.
F 2. When adding dressing to a fresh green salad, allow the dressed salad to soak in the refrigerator overnight.
T 3. A garnish is for decoration, but it may be eaten.
T 4. Gelatin contains the nutrient known as protein.
F 5. Salads are always used as a side dish, and never as the main dish.
F 6. Gelatin salads are difficult to prepare and should be used only for special occasions.
F 7. Pure gelatin must first be soaked in warm water before being used in a recipe.
T 8. French dressing is an emulsion made from eggs, oil and spices.

T 9. Hearty salads are often used as main dishes.
F 10. Light salads are seldom used as accompaniments.
T 11. Sliced tomato and cucumber placed on salad greens is an arranged salad.
T 12. Salad greens are low in calories and high in essential nutrients.

21. SANDWICHES

TRUE - FALSE

T 1. A canape' is an open-faced sandwich.
F 2. Only white and whole wheat bread should be used for sandwiches.
T 3. The most common types of sandwiches in the U.S. are made with two slices of bread.
T 4. Sandwich bread may be toasted before or after spreading the filling.
T 5. Sandwiches can be used as main dish.
T 6. Moisture proof bags are good for wrapping sandwiches.
F 7. It is best to use very fresh bread when preparing finger sandwiches.
T 8. Sandwiches should be wrapped as soon as they are made.
T 9. Beef is the most popular meat for a hot sandwich.
T 10. Do not freeze sandwiches containing eggs, mayonnaise, jelly, or uncooked vegetables.
T 11. Thicker slices of bread are best for hearty sandwiches.

DISCUSSION

1. Explain the construction technique for making rolled sandwiches, using cream cheese and olive filling.
2. Explain why it is best to first spread the bread with soft butter or margarine before applying filling to the sandwich.
3. Describe the characteristics of a good sandwich.

22. SAUCES AND GRAVIES

TRUE - FALSE

T 1. Sauces and gravies may be thickened by using cornstarch or a beaten egg.
F 2. Sauces and gravies are used to cover the flavor of a meat that might not taste good.
F 3. Sauces and gravies should be avoided in food preparation because their only purpose is to add calories.
T 4. White sauces are sometimes called cream sauces.

MATCHING

E 1. Tarter Sauce
C 2. Sauce
H 3. Spaghetti Sauce
F 4. Gravy
J 5. Marinade
A 6. White Sauce
D 7. Be' chamel Sauce
B 8. Hollandaise Sauce
G 9. Drippings, pan or natural gravy
I 10. Dessert Sauce

A. Basic sauce of milk, butter and flour.
B. Rich sauce of butter, egg yolks and lemon juice.
C. A liquid added to improve flavor, appearance and/or nutritive value.
D. White sauce (1/2 chicken broth and 1/2 milk).
E. Mayonnaise based sauce, for seafood.
F. A meat flavored sauce prepared from juice, fat and particles remaining in pan after cooking meat.
G. The juice exuded from meat as it cooks.
H. Thick, highly seasoned tomato base sauce.
I. Sweetened sauce.
J. Thin, highly seasoned sauce containing acid or wine for meat, fish or vegetables.

23. SOUPS

TRUE - FALSE

T 1. Simple cream soup may be a thin white sauce.
T 2. Clear soups are usually meat broths.
T 3. Soup may be liquid, semi-liquid, or jellied.
T 4. One can prepare either brown or white soup stock.
T 5. Vegetables for cream soups are cooked in a small amount of water until tender and then put through a steamer.

DISCUSSION

1. Explain the difference in a clear and a cream soup.
2. What is stock, bouillon, consomme, and chowder?
3. How can soup be clarified?
4. Explain how to make soup stock.

24. SPICES

TRUE - FALSE

T 1. Dried herbs are stronger than the same amount of fresh leaves.
T 2. It is unwise to use herbs in several dishes of the same meal.
T 3. A powdered herb is stronger than the same amount of crumbled leaves.
T 4. In uncooked foods herbs must stand overnight to release their flavor.
F 5. Herbs are leaves of plants which usually grow only in the tropical zones.
T 6. Condiments are usually liquid or semi-liquid mixtures of spices and other ingredients.
T 7. Seeds are from small fruit of plants which grow in the tropical and temperate zones.
F 8. Table salt is a spice.

MATCHING

E 1. Apples
D 2. Stuffing or dressing
B 3. Licorice
A 4. Rye Bread
C 5. Creole Dishes

A. Caraway (seed)
B. Anise
C. File'
D. Sage
E. Cinnamon

25. SWEETENERS

TRUE - FALSE

T 1. Store sweeteners in tightly closed containers and in a cool, dry place.
F 2. Cyclamates and saccharin can be substituted equally for sugar.
F 3. Cyclamates have been proven a definite cause of cancer.
T 4. The per capita consumption of sugar in the U.S. has almost tripled over the last century.
T 5. Saccharin may be used as a sweetener in foods that do not depend upon another function of sugar such as crystallization.

MATCHING

C 1. Granulated sugar which has been ground to a fine powder
F 2. A solution of dextrose in water
D 3. Produced by bees from nectar in flowers
B 4. Granulated sugar not completely refined
E 5. Is a by-product of making cane syrup
A 6. White table sugar

A. Granulated sugar
B. Brown sugar
C. Powdered or confectioner's sugar
D. Honey
E. Molasses
F. Corn syrup

26. VEGETABLES

TRUE - FALSE

F 1. When cooking vegetables, completely submerge them in water for faster cooking.
F 2. Fresh fruits and vegetables which are pre-wrapped do not require washing before eating.
F 3. All vegetables are lacking in fat.
F 4. Frozen vegetables should be thawed before cooking.
T 5. Legumes are vegetables that grow in pods.
T 6. Broccoli, spinach, winter squash, and kale are all good sources of Vitamin A.
T 7. All vegetables should be stored in a cool dry place.
F 8. Vegetables should be soaked in water a long time to ensure cleanliness.
T 9. A minimum amount of water should be used when cooking vegetables.
T 10. The orange and yellow pigments in vegetables are carotinoids.
F 11. Frozen and fresh vegetables should be cooked for the same amount of time.
T 12. Vegetables should be cooked in their skins whenever possible.
T 13. Vegetables are especially valuable for their vitamins and minerals.
T 14. Tomatoes are an excellent source of Vitamin C.
T 15. Green, leafy and yellow vegetables are excellent sources of Vitamin A.
T 16. Corn and potatoes are especially high in carbohydrates.
T 17. Vegetables should be sprayed with ice water or kept in refrigerator bins to retain their freshness.
F 18. Vegetables lose few vitamins when kept over a long period of time.

MULTIPLE CHOICE

C 1. When storing leafy vegetables (a) place in the refrigerator when you get home (b) wash and place in an open bowl so they will be crisp (c) wash and wrap in wax paper, plastic bag, or covered container in the refrigerator.

C 2. One way to lengthen the keeping quality of a food is (a) protection from bruises and cuts (b) proper storage (c) both a and b.

D 3. Which of the following is not a strong vegetable? (a) onions (b) cabbage (c) collards (d) English peas.

B 4. Vegetables that are boiled should be (a) covered with water (b) cooked with a small amount of water (c) use the amount that you want.

D 5. Vegetables are cooked to (a) soften the cellulose (b) make them tender (c) reduce their bulk (d) all of the above.

VIII. FOOD PRESERVATION

TRUE - FALSE

T 1. Sure Jell is a brand of commercial pectin.
F 2. Fruit preserves and fruit jellies are the same.
F 3. Low acid fruits jell more quickly than high acid fruits.
T 4. Enzymes, bacteria, yeasts, and molds may be the agents responsible for the spoilage of foods.
T 5. Only highly acid foods are canned in a water bath.
T 6. All vegetables except tomatoes and pickled vegetables are canned in a steam-pressure cooker.
T 7. For good quality frozen foods, temperatures of 0° F are necessary.
F 8. Microorganisms thrive at the low temperature of around 0° F.
T 9. Fruits may be packed with or without sweetener.
T 10. A microorganism that is extremely difficult to destroy in a low-acid food is clostridium botulinum.
F 11. Citrus fruits freeze well.
T 12. In home canning, foods are divided into high-acid and low-acid categories.

MULTIPLE CHOICE

A 1. The type preservation which will retain the most nutrients in vegetables over a long period of time is (a) freezing (b) refrigeration (c) canning (d) dehydration with heat.

B 2. When freezing fruits such as peaches, ascorbic acid may be added to prevent (a) burning (b) darkening (c) spoilage (d) poisoning.

C 3. Botulism is most likely to occur in (a) tomatoes (b) corn (c) green beans (d) squash.

B 4. Whole fruits are used in (a) jelly (b) preserves (c) jam.

C 5. Pieces of fruit are used in (a) jelly (b) preserves (c) jam.

A 6. Strained fruit juices are used to make (a) jelly (b) preserves (c) jam.

IX. FOODS RELATED OCCUPATIONS

TRUE - FALSE

F 1. Home economics is a woman's profession and there are few opportunities for men in the field.

T 2. The type of the food service operation generally determines the number of workers.

F 3. A person who wants a career in food-related occupations must have a college degree.

T 4. The ability to get along with all kinds of people is a great asset on a job.

T 5. The Fair Labor Standards Act is commonly called the Wage-Hour law.

MULTIPLE CHOICE

D 1. What would probably be the best paying position in food service? (a) family meal aide (b) baker (c) butcher (d) dietitian.

A 2. An inexperienced person in food service should apply for the position of (a) waitress/waiter (b) hostess (c) pantry cook (d) caterer.

C 3. What age must a person be to work during school hours? (a) at least 14 (b) at least 15 (c) at least 16.

B 4. Which duty would be assigned to a stock clerk? (a) assist cook with food preparation (b) deliver supplies to the cooks (c) help prepare menus.

A 5. The disease trichinosis is caused from (a) raw, under-cooked pork (b) canned non-acid foods improperly prepared (c) improperly cooked shell-fish, poultry, eggs and dairy products.

MATCHING

e 1. One employed by another, usually for wages
d 2. A meeting to obtain information
a 3. Net receipts
c 4. A job for which a person is specially trained
b 5. The number of hours you put in beyond regular working time

a. profit
b. overtime
c. vocation
d. interview
e. employee

DISCUSSION

1. Identify and discuss the personal traits which are essential in order to succeed on a job.
2. Explain the three key factors that influence the operating plans of food service units.
3. Describe the advantages and disadvantages of food service work.
4. Compare commissaries with catering services.
5. Explain at least 3 reasons why safety is so important in the food service business.

APPENDIX E

TAXONOMY OF EDUCATIONAL OBJECTIVES

Levels of Learning

Recent trends in homemaking education call for objectives which indicate exactly what changes in behavior should be expected from students. Such objectives may be developed and arranged in order of complexity according to the Taxonomy of Educational Objectives, a system for classifying behavioral objectives.

The Taxonomy of Educational Objectives is divided into three categories, called domains. These are the cognitive domain (thinking), the affective domain (feeling), and the psychomotor domain (doing). Each domain is then divided into a hierarchy of levels from least complex to most complex. Students must reach objectives which are least complex in a domain before they are able to master more complex objectives. To reach objectives at each level students must have mastered learning at all the levels below.

The cognitive domain deals with knowledge and information and is divided into six levels of learning:[1] knowledge, comprehension, application, analysis, synthesis, and evaluation. The hierarchal aspect of the cognitive domain is illustrated in the following example: Students must know and understand basic facts about nutrition before they can apply them in planning nutritious meals.

The affective domain, which deals with attitudes and appreciation, is divided into five levels of learning:[2] receiving, responding, valuing, organization, and characterization. The hierarchy in this domain may be illustrated as follows: A student must be receptive and responsive to maintaining good health before he values having good health, relates health to personal appearance, or allows his desire for good health to direct his behavior to the point that he chooses nutritious meals and snacks and tries to get plenty of rest.

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[1] Bloom, Benjamin S. Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay Company, Inc., 1956.

[2] Krothwohl, David R.; Bloom, Benjamin S.; and Bertram, B. Masia. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc., 1964.

Levels of learning included in the psychomotor domain, the manipulative skill areas, are still being developed. One author[3] has identified possible levels in the psychomotor domain as: perception, set, guided response, mechanism, and complex overt response. The hierarchy in the psychomotor domain may be illustrated as follows: The teacher may demonstrate threading a sewing machine while students perceive what she does. Next the student prepares himself physically, mentally and emotionally to respond. The student then imitates the teacher or follows directions. Practice is required until he can thread the machine with little conscious effort. Finally, the student develops such a high degree of skill that he threads the machine automatically and with confidence.

Objectives in all three categories (cognitive, affective and psychomotor) should be included when planning units in homemaking education. Cognitive and affective domains can easily be included in all areas of homemaking. The psychomotor domain is applicable primarily in teaching skills, particularly in the areas of foods and nutrition and clothing and textiles. Behavioral objectives aid in planning learning experiences as well as in planning evaluation items to measure the degree to which students have achieved these objectives.

The inclusion of objectives at the higher levels of learning as well as at lower levels is another important consideration in curriculum planning. Unfortunately, the memory aspects of learning often dominate the curriculum. Research has shown that a large portion of memorized material is forgotten rapidly and that students are often unable to apply memorized material when needed. For example, a student may know many facts about nutrition without being able to make nutritious food choices for himself. As a result of spending excessive time at the memory level, many teachers tend to offer students little opportunity to develop their capacities at higher levels. To improve the intellectual climate of her classroom, the teacher must consciously include objectives at the higher levels of learning in each domain and provide the necessary learning experiences to enable the students to reach the objectives.

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[3] Simpson, Elizabeth J. "Classification of Educational Objectives, Psychomotor Domain," Illinois Teacher. Vol. X, No. 4, Winter, 1966-67.

LEVELS OF LEARNING

Cognitive Domain[1]

1:00	KNOWLEDGE	Ability to recall, to bring to mind the appropriate material. Involves remembering a wide variety of previously learned materials from specific facts to complete theories.
2:00	COMPREHENSION	Ability to understand or grasp the meaning of what is being communicated and make use of the idea without relating it to other ideas or materials or seeing its fullest meaning. May involve translation, interpretation, or extrapolation.
3:00	APPLICATION	Ability to use ideas, principles, theories, in particular and concrete situations.
4:00	ANALYSIS	Ability to break down a communication into constituent parts to make organization of idea clear. May include identification of parts, analysis of relationships between parts, and recognition of organizational principles involved.
5:00	SYNTHESIS	Ability to put together parts and elements into a unified organization or whole. May involve production of a new communication, a plan of operation, or a set of abstract relations.
6:00	EVALUATION	Ability to judge the value of ideas, procedures, methods, etc., using appropriate criteria.

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[1] Adapted from Bloom, Benjamin S., ed. *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain.* New York: David McKay Company, Inc., 1956.

LEVELS OF LEARNING

Affective Domain[1]

1.00	RECEIVING	Becomes aware of an idea, process, or thing; is willing to learn, or to try a particular behavior. Concerned with getting, holding, and directing the student's attention.
2.00	RESPONDING	Responds obediently, then willingly, and receives satisfaction from responding. Involves active participation on the part of the student.
3.00	VALUING	Accepts worth of belief, attitude, value, or ideal; expresses preference for it; develops a commitment to it. Involves behavior which is consistent and stable enough to make the value clearly identifiable.
4.00	ORGANIZATION	Conceptualizes values; organizes values into hierarchy. Emphasis on comparing, relating and systhesizing values.
5.00	CHARACTERIZATION	Allows values to control or guide behavior; integrates these into a total philosophy of life. Behavior is persuasive, consistent, and predictable. Involves student's general patterns of adjustment.

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[1] Adapted from Krathwohl, David R.; Bloom, Benjamin S.; and Masia, Bertram B., Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay Company, Inc., 1964.

LEVELS OF LEARNING

Psychomotor Domain[1]

1.00	PERCEPTION	Becomes aware of the action to be performed through sensory stimulation. Involves observing to recognize and relate to action.
2.00	SET	Becomes ready to act mentally, physically, and emotionally.
3.00	GUIDED RESPONSE	Performs the action under supervision through imitation or trial and error. Involves practice.
4.00	MECHANISM	Performs the act habitually with some degree of confidence. Involves increased efficiency.
5.00	COMPLEX OVERT RESPONSE	Performs the act automatically without hesitation. Involves high degree of skill.

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[1] Adapted from Simpson, Elizabeth Jane. "The Classification of Educational Objectives Psychomotor Domain," *Illinois' Teacher of Home Economics*, Vol. X, No. 4, Winter, 1966-67. pp. 110-144.

DEFINITIONS OF TERMS

VOCATIONAL EDUCATION - is defined in the 1976 vocational legislation... "means organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree" (PL 94-482, Part C, Section 195, p. 2169).

BEHAVIORAL OBJECTIVE - the expected measurable behavior that should result from successful completion of designated learning experiences.

CONCEPT - an abstract idea used to organize objects and events into a number of categories.

EVALUATION EXPERIENCE - activities which help determine the progress made toward the achievement of specific behavioral objectives.

GENERALIZATION - a complete thought which expresses an underlying truth, has an element of universality, and usually indicates relationships. Generalizations help give meaning to concepts and are based on facts, principles, and past experiences.

LEARNING EXPERIENCES - purposeful activities that have meaning for students at their developmental level and result in some degree of growth toward behavioral objectives.

SCOPE - the extent or range of concepts.

SEQUENCE - the order of progression of concepts.

TAXONOMY OF EDUCATIONAL OBJECTIVES - a system for classifying behavioral objectives into hierarchies or levels of learning in three domains (cognitive, affective, and psychomotor).

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Cronan-Atwood, FIRST FOODS, 1976	7-8
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Medved, THE WORD OF FOOD, 1977	9
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Nutrition Basics	
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Burton, Benjamin T. Human Nutrition (Formerly the Heinz Handbook of Nutrition). 3rd ed. New York, New York: McGraw-Hill Book Company, 1976. 530 pp. (Utilization of foods, food elements, nutrition in health, nutrition in disease, nutrition in emergencies, food poisoning and food toxicology, nutrition and modern food technology, and nutrition in relation to community health.)

Chaney, Margaret S., and Ross, Margaret L. Nutrition. 9th ed. Boston, Massachusetts: Houghton Mifflin Company, 1979. 490 pp. (Scientific introduction to normal nutrition, the interrelationships of nutrients, nutrition and health, imbalance of nutrients, low-cost foods, and the world food situation.)

Cobb, Vicki. Science Experiments You Can Eat. Philadelphia, Pennsylvania: J. B. Lippincott Company, 1972. 126 pp. (Experiments with food demonstrate various scientific principles and produce an edible product; rock candy: recovering solute crystals; popsicles and the freezing point of solutions; syrups: solutions that don't crystallize; salad dressing: a liquid suspended in a liquid; meringues: the properties of egg white; study of gluten; cup cakes: how cakes rise; microbes; and enzymes.)

Cronan, Marion L., and Atwood, June C. *Foods in Homemaking*. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1972. 588 pp. (Teacher's manual. Food in history, hospitality, religion, emotions, future; tools and utensils; language of cookery, sanitation; science; foods for health; shopping; serving; food for family; entertaining; eating out; and recipes.)

Dennler, Louise. *Food Preparation: Study Course*. Ames, Iowa: Iowa State University Press, 1971. 149 pp. (Preparation of fruit, salads, vegetables, meat, poultry, fish, milk, cheese, eggs, cereal, starch products, batters, dough, and menu planning.)

Fleck, Henrietta. *Introduction to Nutrition*. 2nd ed. New York, New York: Macmillan Company, 1971. 503 pp. (Meaning of food, nutrition -- yesterday and today; nutrients, carbohydrates, fats, protein, and amino acids; energy metabolism; vitamins, thiamine, riboflavin, niacin; minerals; water and nutrition; nutrition and teeth; food habits; nutrition for: infants, children, youth, and adults.

Food Service Production and Service. Mid-American Vocational Curriculum Consortium, 1976. Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma 74074. (A Curriculum guide for teachers; workbook for students.)

Fowler, Sina Faye, *et al*. *Food for Fifty*. 5th ed. New York, New York: John Wiley and Sons, Inc., 1971. 446 pp. (Weights and measures, food substitutions and proportions, baking temperatures, syrups and candies, deep-fat frying, spices and seasonings, cooking terms, recipes, and menu planning.)

Future Homemakers of America Adviser's Guide, Louisiana State Department of Education. Capitol Station, P.O. Box 44064, Baton Rouge, Louisiana 70804.

Garb, Solomon. *Food: High Nutrition/Low Cost*. New York, New York: Springer Publishing Company, 1975. 184 pp. (Foods and nutrition, purchasing and storing food wisely, Food-Value Counter, planning a family menu, recipes for high nutrition at low cost, and the politics of foods.)

Guthrie, Helen Andrews. *Introductory Nutrition*. 2nd ed. St. Louis, Missouri: C. V. Mosby Company, 1971. 511 pp. (Basic principles of nutrition: carbohydrates, fats or lipids, protein, energy balance, mineral elements, macronutrient elements, micronutrient elements, water, vitamins, fat-soluble vitamins; water-soluble vitamins; applied nutrition; selection of an adequate diet, evaluation of nutritional status, nutrition in pregnancy and lactation infant nutrition, nutrition from infancy to adulthood, nutritional considerations in aging, weight control, food faddism and quackery.)

Kinder, Faye. Meal Management. 4th ed. New York, New York: Macmillan Publishing Co., Inc., 1973. 579 pp. (Meal management, food laws and the regulation of the food supply; purchasing food; good nutrition; planned spending; satisfying meals; controlled use of time; styles of meal service; setting the table; waiting the table; etiquette of the table; managing guest meals; buffet meals, teas, receptions, and other occasions with light refreshments.)

Kirschmann, John D. Nutrition Almanac. New York, New York; McGraw-Hill Book Co., 1975. 272 pp. (Nutrition and health; sources of calories: carbohydrates, fats, and proteins; nutrients; ailments and stressful conditions; foods, beverages, and supplementary foods; table of food composition; essential amino acid contents of some foods; a sample of a nutritionally balanced meal; nutrient allowance chart; computerized diet analysis; and glossary.)

Kohlmann, Eleanore L. Home Economics for Young Men: A Teaching Guide. Ames, Iowa: Iowa State University Press, 1975. 214 pp. (Concepts, generalizations, objectives, learning environments, teaching suggestions related to man's role, home and family living, child development, preparation for the world of work, consumer education, textiles and clothing, food and nutrition, and housing.)

Lewis, Dora S.; Peckman, Gladys C.; and Hovey, Helen S. Family Meals and Hospitality. New York, New York; Macmillan Publishing Co., Inc., 1972. 532 pp. (Nutrition, mealplanning and preparation, and entertaining.)

Lowenberg, Miriam E. et al. Food and Man. 2nd ed. New York, New York: John Wiley and Sons, Inc., 1974. 459 pp. (Importance of food in the affairs of nations emphasizing the way food has changed the course of history as well as the psycho-social basis of individual food habits.)

McDermott, Irene E.; Norris, Jeanne L.; and Nicholas, Florence W. Homemaking for Teenagers -- Book I. rev. ed. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1975. 591 pp. (Home, family, and you: spiritual and emotional growth; personality, manners, and interests; why children act like children; designing, managing, living space; careers in home economics; grooming, clothes, and sewing; and learning to cook, bake, shop and plan.)

McDermott, Irene E.; Norris, Jeanne L.; and Nicholas, Florence W. Homemaking for Teenagers -- Book II. rev. ed. Peoria, Illinois: Chas. A. Bennett Co., Inc., 1976. 736 pp. (Advanced text for more mature activities. Your place in life, goals, talents, personality; family, friends, marriage and home, career; child development; money management; clothing, fabric dictionary, making clothes; choosing home furnishings; foods, nutrition, and consumer information.)

McDermott, Irene E.; Trilling, Mabel B.; and Nicholas, Florence W. Food for Modern Living. rev. ed. Philadelphia, Pennsylvania; J. B. Lippincott Co., 1973. 588 pp. (Kitchen equipment, kitchen housekeeping, table setting, service, manners, nutrition, meal planning, meal preparation and entertaining.)

Medved, Eva. The World of Food. Lexington, Massachusetts: Ginn and Company, 1977. 538 pp. (Teacher's guide and tests. Food concepts, food management practices, and cookery skills.)

Nidetch, Jean. Weight Watchers Cookbook. New York, New York: Hearthside Press, 1973. 288 pp. (Rules and menu plans; recipes in the following categories: eggs, cheese, fish, meat, poultry, unlimited vegetables, sauces, dressings, dips, nuts, milk; height and weight chart.)

Peck, Leilani Brinkley. et al. Focus on Food. New York, New York: Mcgraw-Hill Book Company, 1974. 422 pp. (Food for everyone; the road to good nutrition, food choices, presenting food creativity, buying food, metric system from conversion factors and equipment to metric recipes, and careers in food and nutrition.)

Peckham, Gladys. Foundations of Food Preparation. 4th ed. New York, New York: Macmillan Publishing Co., Inc., 1978. 556 pp. (Composition of food, factors affecting food consumption, management in food preparation, preparation of foods and food products, food preservation and food controls.)

Post, Elizabeth L. The New Emily Post's Etiquette. New York, New York: Funk and Wagnalls, 1975.

Rombauer, Irma S., and Becker, Marion R. Joy of Cooking, Vol. 2. Rev. ed. Indianapolis, Indiana: Bobbs-Merrill Co., Inc., 1975. 849 pp. (Recipes; cross reference index; listing of classic and foreign terms; hints on herbs, spices, and seasonings; menu and calorie charts).

Sultan, William J. Elementary Baking. New York, New York: McGraw-Hill Book Company, 1969. 268 pp. (Workbook. Basic guide to baking and preparation of quick bread and yeast bread products, fried products, pies, cakes, puff pastry, and cookies.)

Thorner, Marvin Edward. Convenience and Fast Food Handbook. Westport, Connecticut: AVI Publishing Company, Inc., 1972. 358 pp. (History of convenience and fast foods, the fast food preparation center, and the control, evaluation, and handling of efficiency foods.)

Vanderbilt, Amy. Amy Vanderbilt's Etiquette. rev. ed. Garden City, New York: Doubleday and Company, Inc., 1972. 738 pp. (Complete reference on etiquette.)

Wilson, Eva D. et al. Principles of Nutrition. 3rd ed. New York, New York: John Wiley and Sons, Inc., 1975. 598 pp. (Human nutrition on an international scale with equal treatment of both basic and applied nutrition.)

PAMPHLETS

Ball Blue Book. Munice, Indiana: Ball Corporation, 1972. 112 pp. (Home canning and freezing.)

Be Wise! Food Facts You Should Know! Schaumburg, Illinois: Cereal Institute Inc., 1976. 11 pp. (Free, fifty copies for class or group work. Our changing eating habits, quick-to-serve foods, cereals and today's breakfasts, nutrition labeling, breakfast aids performance.)

Conserving Nutrients in Fresh Fruits and Vegetables. Washington, D.C.: United Fresh Fruit and Vegetable Association, 1976. 6 pp. (Enemies of nutrients, freshness, ripeness, what happens to nutrients in preparation.)

Eat to Live. Washington, D.C.: Wheat Flour Institute, 1976. 80 pp. (Importance of food; recommended dietary allowances; Basic Four; health, overweight and obesity; nutrition labeling; essential nutrients; inorganic elements; dietary fiber; foods with added nutrients; how to plan nourishing meals, food selection; spend your food dollar wisely; the metric system, and nutritive value of foods.)

Fit for Life. Battle Creek, Michigan: Kellogg Company, 1976. 12 pp. (Free, limit of 30 copies per teacher. Combining sound nutrition with a physical fitness program.)

Food Home and Garden Bulletin Number 228. Prepared by Science and Education Administration, U.S. Dept. of Agriculture, U.S. Government Printing Office. Washington, D.C. 20402.

Food and Pregnancy. The National Foundation on March of Dimes, Box 2000, White Plains, New York 10602.

Food for the Family - A Cost Saving Plan. Washington, D.C.: U.S. Government Printing Office, 1976. 21 pp. (Consumer Information Center. Guidelines for planning low-cost, well-balanced meals; includes menus and recipes.)

How Do You Score on Nutrition? Chicago, Illinois: Vitamin Information Bureau, Inc., n.d. 4 pp. (Nutrients, health and energy; unfolds into "scoreboard" to identify/record vitamins consumed in the foods selected/eaten for one week.)

Nutrition: Food at Work for You. Washington, D.C.: U.S. Government Printing Office, 1975. 24 pp. (Order from Consumer Information Center. Functions and sources of major nutrients; how to estimate your daily food needs; and tips on buying and storing food.)

Proteins, Carbohydrates, Fats, and Fibers. Washington, D.C.: U.S. Government Printing Office, 1975. 9 pp. (Free. Order from Consumer Information Center. What they are, what they do in your body, and how to include them in your diet.)

See the Facts About the Foods You Eat. Schaumburg, Illinois: Cereal Institute, Inc., 1975. 7 pp. (Free, fifty copies for class or group use. Nutrition information on food labels.)

Vitamins and Your Health. Chicago, Illinois: Vitamin Information Bureau, Inc., n.d. 16 pp. (History and nature of essential vitamins; food groups.)

What About Metric. Washington, D.C.: U.S. Government Printing Office, 1973. 18 pp. (Consumer Information Center. Advantages and growing use of the metric system; conversion tables for weight, length, volume, and temperature.)

Your Food Dollar. Chicago, Illinois: Household Finance Corporation, n.d. (How to plan and shop for food; guides for buying all types of foods.)

Your Money's Worth in Foods. Washington, D.C.: U.S. Government Printing Office, 1974. 26 pp. (Order form: Consumer Information Center, budgeting, menu planning, and shopping for best values.)

PAMPHLET SOURCES

Ball Corporation, Munice, Indiana 47302. (Home canning and freezing.)

Cereal Institute, Inc., 1111 Plaza Drive, Schaumburg, Illinois 60195. (Food and nutrition, health and consumer affairs.)

Consumer Information Center, Pueblo, Colorado 81009. (Consumer education, food, diet and nutrition, health, children, employment and education, housing, appliances, household furnishings, home energy conservation, money management, and metrics.)

Henderson Publications, Inc., 6057 Melrose Avenue, Los Angeles, California 90038. (Nutritional information on fresh fruits and vegetables.)

Household Finance Corporation, Prudential Plaza, Chicago, Illinois 60601. (Money management, shopping and buying food, clothing, and insurance.)

Kellogg Company, Battle Creek, Michigan 49016. (Nutrition and diet.)

Louisiana Egg Commission, Baton Rouge, Louisiana 70806.

Manufacturing Chemists Association, 1825 Connecticut Avenue, N.W., Washington, D.C. 20009. (Consumer education, environmental health, food additives, safety, and different phases of the chemical industry.)

National Dairy Council, Rosemont, Illinois 60018.

Proctor and Gamble, P.O. Box 14009, Cincinnati, Ohio 45214.

United Fresh Fruit and Vegetable Association, 1019 19th Street N.W., Washington, D.C. 20036. (Educational aids on fresh fruits and vegetables.)

U.S. Government Printing Office, Washington, D.C. 20402. (Consumer information.)

Vitamin Information Bureau, Inc., 664 N. Michigan Avenue, Chicago, Illinois. (Nutrition education.)

Wheat Flour Institute, 14 East Jackson Boulevard, Suite 1010, Chicago, Illinois 60604. (Basic nutrition facts and food preparation.)

The National Foundation March of Dimes, Box 2000, White Plains, New York 10602.

PERIODICALS

Changing Times: The Kiplinger Magazine. (Published monthly. Guidelines for the consumer.)

Co-ed. Englewood Cliffs, New Jersey: Scholastic Magazines, Inc. (Published monthly - September to May/June, August. Special features on child development; intellectual, social, emotional, and physical aspects of teenage girls; food preparation; fashion: to make, to buy; housing; and money management.)

Energy Reporter. Washington, D.C.: Federal Energy Administration's Office of Communications and Public Affairs (FEA). (Free. Monthly. Energy usage.)

Food and Nutrition. Washington, D.C.: U.S. Government Printing Office. (Published bimonthly. Information needed to help families improve their diets.)

Forecast. Englewood Cliffs, New Jersey: Scholastic Magazines, Inc. (Published monthly - September to May/June. Co-ed magazine. Teaching techniques, special features, clothing and textile arts, health and grooming, food and nutrition, home furnishings and equipment, careers, crafts, personal development, and consumer awareness.)

Illinois Teacher of Home Economics. Urbana, Illinois: Illinois Teacher, University of Illinois. (Published five times during academic year. Teaching techniques and curriculum ideas.)

Penney's Forum. New York, New York: J.C. Penney Company, Inc. (Free. Distributed by managers of J.C. Penney stores bi-annually. Curriculum ideas; teaching techniques; and special features such as value clarification, consumerism, interpersonal relationships, attitudes, behavior, human potential, and other information for educators.)

Teen Times. Washington, D.C.: Future Homemakers of America. (Published quarterly - September, November, January, and March. In-depth projects to meet goals, using articles as teaching tools, career information, and member idea exchange.)

Tips and Topics. Lubbock, Texas: Texas Tech University. (Published quarterly. Teaching ideas and information on current trends in the field of home economics.)

What's New in Home Economics. Philadelphia, Pennsylvania: North American Publishing Company. (Order from: What's New in Home Economics. Published monthly - May, September, and December; twice monthly - January, February, March, April, October, November. Special features on child development, consumer education, nutrition, clothing and textiles, housing, and money management; critique of new educational materials and teaching techniques.)

TEACHING AIDS

All About Knives and Carving. Filmstrip, 64 frames. Elko Housewares Co., Franklin Park, Illinois.

Balance Your Diet for Health and Appearance. Paramus, New Jersey: Karol Media, n.d. (One 16 mm. film, 10 minutes. Importance of diet to weight, skin condition, and personality.

Biscuits, Plain and Fancy. Minneapolis, Minnesota: General Mills, (Filmstrip, color, silent, 65 frames. One student booklet. Fundamental skills in biscuit making with streamlined recipes and ideas for bolstering the budget.)

The Calorie Game. Urbana, Illinois: Graphics Company, 1972. (One game. Food board, dice, score sheet, charts of nutrient values of food. Relation of activity and caloric expenditure and the relation of nutrient value and calorie value in certain foods.)

The Cooking Kit. Junior Charity League of Spartanburg, Inc., Spartanburg, South Carolina.

Celebrate with Cake. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, color, silent, 53 frames. Narration guide. Cakes made from scratch, made from a mix, and variations for parties.)

Changing Foods in Changing Times. Schaumburg, Illinois: Cereal Institute, Inc., 1976. (Free loan. One 16 mm. film, color, sound, 16 minutes. Principles of nutrition, factors affecting today's food choices and meal patterns, the evolution of breakfast and cereals, and the value of nutrition information on food packages.)

Cholesterol -- Eat Your Hearts Out. New York, New York: Sterling Educational films, 1975. (One 16 mm. film, color, sound, 14 minutes. Experiment designed to determine the effect of diet on the blood cholesterol of two groups of high school students.)

Crossword Puzzles for Consumer Education. Homemaking Research Laboratories, 1975. Tony, Wisconsin 54563.

Easy as Pie. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, color, silent, 89 frames, narration guide. Step-by-step instructions for making pastry, pie fillings, and meringues.)

Forecast for Home Economics, "1980 Annual Visual Aids and Learning Materials." December 1979. Vol. 25. Scholastic Magazines, Inc., Englewood Cliffs, New Jersey.

The Economy of Convenience Foods. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, sound, 15 minutes. Student booklet, cassette. How new life-styles, shared household chores, and the time and money crunch point to convenience foods; planning quick, nutritious meals.)

The Fad Diet Circus. Sterling Educational Films, 1975. (One 16 mm. film, color, sound, 15 minutes. Hazards of unbalanced "fad" diets.)

Flair with Frostings and Desserts. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, color, silent, 82 frames. Narration guide. Complete steps in frosting cakes with ideas for easy, unusual cakes and desserts.)

Food as Children See It. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, sound, 15 minutes. Record, 25 student booklets. Good nutrition and food attitudes for preschoolers.)

Food Preparation (Home/Food Service). Cincinnati, Ohio: Proctor and Gamble Co., 1975. (One teaching unit, 80 page educator resource guide, 17 student worksheets (duplicating masters), 6 master visuals for making overhead transparencies. Part I -- Food Facts for Home -- nutrition, meal planning, food preparation skills (baking, frying); Part II, Facts About Food Service -- job opportunities and basic food service skills.)

Garbage in Your Gut. Sterling Educational Films, 1975. (One 16 mm. film, color, sound, 15 minutes. How simple changes in snacking habits can turn a "bad snacker" into a "good snacker.")

Home Canning: Do It Safely. Washington, D.C.: U.S. Department of Agriculture, 1975. (Slides; filmstrip. One filmstrip or 75 slides, color, sound, cassette. Step-by-step procedures for home canning of fruits and vegetables.)

Homemade Breads. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, color, silent, 56 frames. One student booklet. Steps in making plain and fancy yeast breads and rolls.)

How to Buy Beef. Washington, D.C.: U.S. Department of Agriculture, n.d. (One 35 mm. filmstrip, 33 frames, cassette. How to buy beef by USDA grades and cuts for best dollar value; cooking methods for various cuts of beef.)

How to Buy Eggs. Washington, D.C.: U.S. Department of Agriculture, n.d. (One 35 mm. filmstrip, 40 frames, cassette. How to buy eggs by USDA grades and weight classes for best buy.)

How to Buy Poultry. Washington, D.C.: U.S. Department of Agriculture, 1976. (One 35 mm. filmstrip, 80 frames, cassette. How to buy poultry by classes, types, sizes, and grades; tips on home storage; and preparation.)

Human Body: Nutrition and Metabolism. Paramus, New Jersey: Karol Media, n.d. (One 16 mm. film, 13 minutes. Basal metabolism and active metabolism; carbohydrates, fats, proteins, vitamins, and minerals.)

Improving Teenage Nutrition. Washington, D.C.: U.S. Department of Agriculture, n.d. (One filmstrip, 27 frames, cassette. Ways to improve teenage nutrition.)

Inside My Mom. Filmstrip. National Foundation March of Dimes. Box 2000, White Plains, New York 10602. (Nutrition during pregnancy.)

The Marvels of Microwave. Corning, New York: Corning Glass Works, 1976. (One resource kit, 1 1/2 cup Corning petite pan, filmstrip and cassette, teacher's guide, flash cards, transparencies, and wall chart. Microwave cooking.)

Mealtime Planning. Minneapolis, Minnesota: General Mills, n.d. (One filmstrip, 84 frames, one student booklet, narration guide. Good nutrition in appetizing, attractive meals with management of time, money, and energy.)

Meet What You Eat. Chicago, Illinois: Swift and Company, 1976. (Free loan. One 16 mm. film. Basic food groups, the importance of careful menu selection, and the role of several key nutrients.)

Microwave Meals. Minneapolis, Minnesota: General Mills, 1976. (One filmstrip, color, sound, 14 minutes, student booklet, cassette. Basic principles of microwave cooking and the different sequence used in preparing meals.)

More Than a Breakfast Cereal. New Hyde Park, New York: Modern Talking Picture Service, Inc., n.d. (Free loan. One 16 mm. film, color, sound, 10 minutes, printed teaching materials. Basic cooking skills and creativity in cooking.)

Moving to Metric. Corning, New York: Corning Glass Works, n.d. (One resource kit, one 500 ml. liquid measure, set of three dry measures, set of five small measures, metric ruler, teacher's manual, 10 duplicating masters, 3 wall charts, 6 decals with temperature guides, 6 oven stickers with celsius replacement temperatures for oven use. Basics of metrics, metric measures for cooking, practical application of metric.)

Nutri Bingo. Kansas City, Missouri: Gillum Book Co., n.d. (One game, 28 players cards, question and answer caller cards, players markers, instructions.)

Nutrition Facts to Guide Your Food Choices. Schaumburg, Illinois: Cereal Institute, Inc., 1976. (Free, single copy to instructors or leaders. One poster. Variety of breakfast cereals available to consumers; nutrition labeling.)

The Nutrition Game. Urbana, Illinois: Graphics Company, 1972. (One game, 165 cards, deck of money cards, deck of calorie cards. Nutritional value of foods, the relation of nutrients to body functions, and the penalty that nature exacts when the necessary amount of such nutrients is lacking.)

Series HE-2: Food and Nutrition. Ossining, New York: Eduational Resources Associates, Inc., n.d. (Five crossword puzzles. Foods, dishes, foreign dishes, nutrition and food preparation.)

Shield of Good Health. Washington, D.C.: Wheat Flour Institute, n.d. (One chart, Basic Four and recommended servings.)

Shine When You Dine. Costa Mesa, California: Franklin Clay Films, 1976. (Two filmstrips, 12 minutes each, discussion guide. "Manners" -- Use of napkins, dealing with the host, eating spaghetti and chicken, formal and informal situations; "Table Settings" -- step by step -- demonstrations of the correct way to set a table; the basics, the buffet situation and the formal occasion.)

Super Sandwich. New York, New York: Teaching Concepts, 1976. (One game, Knowledge of nutrition creates a "Super Sandwich" containing foods which provide the RDA for protein, calcium, Vitamin A, B-complex, and C while not exceeding the allowed number of calories.)

Vitamins and You. Chicago, Illinois: Vitamin Information Bureau, Inc., n.d. (One filmstrip, color, 50 frames. Vitamins and why they are essential parts of good nutrition.)

TEACHING AID SOURCES

American Dry Milk Institute, Inc., 130 North Franklin Street, Chicago, Illinois 60606.

American Home Economics Association, 2010 Massachusetts Avenue, N.W., Washington D.C. 20036.

American Institute of Baking, 400 East Ontario Street, Chicago, Illinois 60611.

Beef Educational Materials, Louisiana Cattleman's Association, Suite B-103, Horner Bldg., 8312 Florida Street, Baton Rouge, Louisiana 70806.

The Food and Drug Administration (FDA), Department of Health, Education, and Welfare, Washington, D.C. 20852.

Future Homemakers of America, 2010 Massachusetts Avenue, N.W., Washington, D.C. 20036.

Kerr Glass Manufacturing Corporation, Dept. FC, Box 997, Sand Springs, Oklahoma 74063.

Kraft Foods, P.O. Box 730, Chicago, Illinois 60677.

Louisiana Cooperative Extension Service

Local 3M business products dealer.

Manufacturing Chemists Association, 1825 Connecticut Avenue, N.W., Washington, D.C. 20009.

National Dairy Council, Nutrition Education Division, 111 North Canal Street, Chicago, Illinois 60606.

National Pork Producers Council, 4715 Grand Avenue, Des Moines, Iowa 50312.

Office of Consumer Affairs, New Executive Office Building, Seventeenth and H Street, N.W., Washington, D.C. 20506.

Sperry and Hutchinson Company, Consumer Services, 330 Madison Avenue, New York, New York 10017.

Swift and Company, Office of Public Responsibility, 115 W. Jackson Boulevard, Chicago, Illinois 60604.

U.S. Department of Agriculture, Office of Communication, Washington, D.C. 20250.

PUBLISHERS LIST

AVI Publishing Co., Inc.
P.O. Box 831
250 East State Street
Westport, CT 06880

Barr Films
P.O. Box 5667
Pasadena, CA 91107

Bobbs-Merrill Company, Inc.
Educational Publishing Div.
4300 West 62nd Street
Indianapolis, IN 46206

Cereal Institute, Inc.
1111 Plaza Drive
Schaumburg, IL 60195

Changing Times Education Service
1729 H Street N.W.
Washington, D.C. 20063

Corning Glass Works
Product Information Dept.
Building E-IF
Corning, NY 14830

Doubleday and Co., Inc
Educational Division
501 Franklin Avenue
Garden City, L.I., NY 11530

Educational Resources Associates,
Inc.
137 Charter Circle
Ossining, NY 10562

Federal Energy Administration
Washington, D.C. 20461

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P.O. Box 2213
Costa Mesa, CA 92626

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2010 Massachusetts Avenue N.W.
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General Mills, Inc.
Box 1113
Minneapolis, MN 55440

Gillum Book Co.
Box 4504, Station C.
Kansas City, MO 64124

Ginn and Company
Xerox Education Center
191 Spring Street
Lexington, MA 02173

Graphics Company
P.O. Box 331
Urbana, IL 61801

Hearthside Press, Inc.
445 Northern Boulevard
Great Neck, NY 11021

Heath, D.C., and Company
125 Spring Street
Lexington, MA 02173

Holt, Rinehart and Winston, Inc.
383 Madison Avenue
New York, NY 10017

Houghton Mifflin Co.
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1 Beacon Street
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Illinois Teacher
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Inter Harvest, Inc.
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1221 Avenue of the Americas
New York, NY 10036

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Del Mar, CA 92014

MacMillan Publishing Co., Inc.
Riverside, NJ 08075

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Consortium
Oklahoma State Dept. of Vocational
and Technical Education
Stillwater, Oklahoma 74074

Modern Talking Picture Service, Inc.
2323 New Hyde Park Road
New Hyde Park, NY 10040

Mosby, C.V., Co.
11836 Westline Industrial Drive
St. Louis, MO 63141

North Castle Books
212 Bedford Rd.
Greenwich, CT 06830

J.C. Penney Co., Inc.
Educational Relations
1301 Avenue of the Americas
New York, NY 10019

Prentice-Hall, Inc.
Englewood Cliffs, NJ 07632

Procter and Gamble Co.
P.O. Box 14009
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Richards, Frank E., Publishing
Co., Inc.
330 First Street
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Liverpool, NY 13088

Saunders, W.B., Co.
218 West Washington Square
Philadelphia, PA 19105

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902 Sylvan Avenue
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Springer Publishing Co.
200 Park Avenue S.
New York, NY 10003

Sterling Educational Films
241 East 34th Street
New York, NY 10016

Swift and Company
115 W. Jackson Blvd.

Teaching Concepts
230 Park Avenue
New York, NY 10017

Texas Education Agency
201 East Eleventh Street
Austin, TX 78701

Tips and Topics
College of Home Economics
P.O. Box 4170
Texas Tech University
Lubbock, TX 79409

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Wayne, NJ 07470

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Chicago, IL 60604

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